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Address.

SOME ASPECTS OF MEDICAL EDUCATION.

PRESIDENT'S ADDRESS AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY, JUNE 7-10, 1904.

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PHILADELPHIA.

It is no trifling occasion that draws together from the uttermost parts of the country one-fifth of an organization of a profession that is taxed to its utmost in the prosecution of its duties. It is not with sounding trumpets and tinkling cymbals that from the sorrowing bedside —whether in the hovel of the poor or the palace of the rich—from the excitement of the operating room, from the stimulus of the hospital ward or the quiet but inspiring haunts of the laboratory this assembly gathers. That it is possible is a handsome tribute to the noble animus in which are embodied a spirit of inquiry, a thirst for knowledge, a longing for inspiration, a desire to uplift and to be uplifted that pervades the profession. The event is one that should be fraught with the dignity, the inspiration, one might almost say solemnity, befitting a symphonal march. For such animus, fellow members, we have just cause for self-congratulation.

It scarcely need be reiterated here that the spirit which pervades such a meeting is the outcome of that evolution which began with the introduction of precision in medicine. Just as soon as the art of medicine had for its foundation the science of medicine, the possibility of harmonious medical organization arose. When "rule of thumb" or intuition gave way to precision; idealism to realism; when speculation was displaced by fact; when, in short, inductive methods were employed and honest inquiry became the guiding star of action, then harmony could sit in council.

With medical, as with all organizations made up of human elements, it would be only human if not pervaded by the essence of science—truth. Hence with the latter wanting, jealousies and ambitions, self and selfishness would prevail to the end that the true object of organization—a fraternal spirit and conscientious seeking for truth—would be as a flickering flame. A little observation will show that that society, whether county, state or national, that does not have this true reason for its existence, for its guide of action, will be a failure. The reverse is also true that that organization which may be called unsuccessful and unhappy, of snarling men and backbiting colleagues can be labeled at once as without its true vocation, to the discredit of its members.

The great heights to which our organization is rapidly rising, precludes the activities of such as have self for their basis of action, so that each day we see more and more a noble rivalry of its members to do the utmost and the best for the organization; a healthful vieing of one another for its welfare. Self and selfishness are looked at askance; partisanship and faction, save for a common end—the welfare of the Association—are memories.

But, fellow members of the Association, at this the fifty-fifth session of our Association we have other causes for congratulation and felicitation. We are on the eve of a union of all the members of the profession in one harmonious organization, each individual of which is willing and proud to consider his fellow a gentleman until he is proved not to be, and not, as of yore, a knave until he is proved to be a saint. We are reaping the rewards of that untiring committee which gave to us this organization with which we now labor. We are prospering beyond measure and gathering a force scarcely to be estimated, in great part as a result of the untiring efforts of the apostle of organization—our McCormack. To say that thirty-four states have adopted the uniform plan of organization, and "that membership in the reorganized states has increased 400 per cent. and enthusiasm," writes our coadjutor, "tenfold more," is enough. We are standing out in our own manliness with the majesty that belongs thereto because of the sentiments expressed when our broadly inspired committee voiced the unanimity of feeling which belonged to the Association, in our principles of ethics. We are letting our light shine through the instrumentality of that genius of medical editors—our Simmons. From five thousand to thirty thousand in less than a decade is a statement of circulation which appals and at the same time arouses a feeling of pride and stimulates to further effort, increased all the more when we reflect that the scientific value of the articles in THE JOURNAL are surpassed by none of its contemporaries; its tone is emulated by all.

Such causes for congratulation bring to this Association greater responsibilities and weightier problems for solution. It is held to be the bounds of this address to indicate responsibilities, some trite and apparently trifling, others most weighty; to point out duties, many so grave and vast, beyond the powers of your official to justly define.

NECROLOGY.

Before passing to the task let us pause a moment and with due reverence take cognizance of our colleagues who have since our last meeting gone to the great majority. The Silent Reaper has been as rapacious as in the past, and more than fifteen hundred fell in his swath. He has spared neither the humble nor the great. The less conspicuous but just as potent laborers in the vineyard can say with the others: "I have fought a good fight, I have finished my course, I have kept the faith."

Of those who have been honored by this Association in the past we lost two ex-presidents, the hearty, rugged, yet withal gentle and kindly Donald MacLean, surgeon

and teacher, and the urbane James Farquhar Hibbard, a revered general practitioner and teacher; two ex-vice-presidents in John Bates Johnson, one of the founders of the Association, a great practitioner, an honored teacher, and Isaac Newton Love, genial and magnetic. From the ranks we lost Edmund Andrews, scientist, pioneer in surgery and medical education in the west; George Julius Engelmann, obstetrician, scientist, litterateur, teacher, honored at home and abroad by membership in great organizations; James McFadden Gaston, pioneer in the surgical treatment of affections of the gall bladder and gall ducts, an esteemed practitioner; Franklin Staples, Hamilton Atchison West, Orpheus Everts, each obtained prominence and respect by force of character and natural attainments; Emile A. de Schweinitz, scientist and brilliant investigator, laboring not for his own renown but for that of his profession, passing away at the threshold of a most promising career; Frank Savary Pearce, untiring and enthusiastic, who had been expected to counsel with us this week.

HOUSE OF DELEGATES.

The conduct of business under the new constitution bodes success. The two years of trial have indicated that to the House of Delegates the greatest responsibilities fall. When its members consider the great power the American Medical Association will have for weal or woe in the future and that the great body gives that power almost unstintingly to the delegates, they should justly realize the honor and confidence bestowed on them. With such realization will come honest purpose and deliberate action. All the county and state organizations must appreciate the vast duties to be undertaken and the breadth of view, deliberation and wisdom essential to their correct performance, and consequently select from their number the best of their possessions. Let us as an organization see to it that honor and homage come to those who labor unceasingly in the House of Delegates.

NATIONAL LIFE.

It can be readily seen that an organization of the magnitude and with the object and the spirit of our Association must in justice to itself and duty to its country take part in its social and political life. In order that we can be in touch with such life it would be well for the Association to devote some time to the discussion of broad general topics. We have provided for discussions at this meeting, the advisability of which may be termed tentative. We feel they can be productive of great good, and if the experience on this occasion is the least encouraging, we would urge their continuance. We had hoped to have government officials take up matters pertaining to the relation of the medical profession to the executive, legislative and administrative departments of the government. The exigencies of politics forbade our obtaining the services of those worthy to address this body. All men of political affairs are too busy at this juncture. At other times we may learn with profit from our rulers and law makers. As arranged for this week, so in various parts of the country in which the meetings are held, broad topics of general interest, perhaps with local flavor, could be discussed. From those in the far west we might learn much of climate or how to conquer the plague or the medical aspect of "the yellow peril." The good judgment of the committee, or the President, can be relied on to select topics suitable to the occasion.

It is needless to refer to the demands that will be made on us by the nation in the future. You will learn through the representatives of the Army, the Navy and the Marine-Hospital Service what is expected of us. My distinguished predecessors, Reed, Keen and others, have pointed out our possibilities for good in the legislative halls of county, state and nation. We must have care never to be partisan or factional toward the weighty matters we will have to decide. We must realize that the power we have may be our undoing. We must realize that we are entering on dangerous ground and that it would better become us to be bidden rather than to intrude ourselves into such territory. Indeed, one may tremble not a little at the possibilities of our development in the wrong direction. So long, however, as we hold true to the spirit which comes out of devotion to science we need not fear.

THE SECTIONS.

The work in most of the sections the past few years bears favorable comparison with that of co-ordinated organizations throughout the country. To inflict discussion concerning them on this general meeting is, we realize, somewhat of a hardship. Your indulgence is craved, however, for through your medium alone can the sections be reached, while peradventure the work of these sections is fully as important as that of any branch of our Association work. If you will look into it you will find the rise of the Association came with the development of section work. To enhance the value of such work is, therefore, to uplift the organization. The present methods are worthy of trial for a few years just as we should not make haste in changing the new constitution. Regarding it, may we suggest thought along these lines?

1. The continuance of the secretary for a term of years.

2. The collaboration of sections so that one topic can be exhaustively considered at the meeting of the Association without repetition in other sections. For this purpose the officers of the sections should meet for consultation six or eight months before the annual meeting. We feel we did good work by having our distinguished chairmen and secretaries come together last October.

3. The division of the Association into two main sections for work in the mornings, that of (A) *medicine*, including pathology, diseases of children, nervous and mental diseases, materia medica, stomatology, cutaneous medicine and sanitary science; (B) *surgery*, including obstetrics, gynecology and the more closely related surgical specialties. The members interested in diseases of the eye or nose or throat could contribute to either section the result of any studies related to the respective section. The afternoons could be occupied by the specialized labor of the twelve sections now in existence.

Perhaps it might be thought better to have one morning, at the direction of the Section on Practice of Medicine, devoted to the discussion of general topics related to medicine, in which the entire Association could take part; another morning, at the direction of its secretary, to surgery; a third to the specialties; a fourth to sanitary science. The object is to secure the views of physician, surgeon and specialist on general topics. To suggest the subject of endarteritis is to call up at once the possibilities for the internist, the surgeon and the specialist.

4. The sections should take up and organize special international congresses when the time is ripe for such meetings. Thus an International Congress of Dermatology could be managed by the correlated section of this Association. With the patronage of the American

Medical Association any congress that could command such special energies and broad general support could not fail.

5. The section should name to the President a list of its members from which he could select, when asked, delegates to important national meetings or international congresses.

SANITARY SCIENCE.

The Section on Hygiene and Sanitary Science should receive greater support from the organization. It is the section which must bring us in closer touch with our national life. Through it and those devoted to it we ought to secure greater respect from the body politic, and hence more wholesome power for the welfare of the community. Through it the profession should learn to take greater interest in the work of sanitary officers throughout the country. The valuable address of Billings on "The Relation of Medical Science to Commerce" and that of Thompson on "The Economic Value of Medical Science" indicate the opportunities and responsibilities of the profession. The time has gone by when sanitary positions should be used for temporary sources of income and obtained by political means. Such offices are growing more and more vital to the public welfare. They have not been attractive because the rewards have not been commensurate with the responsibility and the labor demanded. They should, we will admit, if looked at from the proper viewpoint, grant large compensation and the occupant should be guaranteed tenure of office not subject to party exigencies but dependent on value received. The fault is partly ours that such is not the case. In but few medical schools is there a serious attempt to educate sanitarians, consequently the physicians who engage in sanitary science in an amateurish way do not give a *quid pro quo*. It does not pay a community to hire them. In one of the large cities of this country it has been impossible for the health authorities to get men who were competent to take up health matters, even though the city was prepared to pay fair salaries. Speculation need not run riot in estimating what would occur in a few years if our universities would give sound practical courses of a broad character, including some engineering, some economics and other features which would round out the man. In preliminary and subsequently in the elective studies the student should not be tempted to go into the special lines of practice. He should have opportunity to go in for sanitary science and perhaps for government service in the Army, the Navy, or other departments. The communities would soon find the worth of men thus educated, and the demand, we would venture to predict, would outrun the supply. In proof of the former, we may cite the fine tribute given to Wende of Buffalo by the citizens, *en masse* and of one accord, for the work of self-sacrifice, of unselfishness and of worth as official of the health department. Our Association could as a body and in its constituent parts encourage the medical schools to make such training possible; they could educate the community to demand such services and insist that good compensation is to be allotted for it. The Section on Sanitary Science could take up this as one feature of their work.

But for a more grievous reason, the profession's attitude, there is public disrespect. Survival of the old dictum that a patient's woes are confidential, supports too often the attending physician in failing to realize his responsibility to the community while attending to the welfare of his client. For this, as well as too often for personal reasons, he readily connives with the patient to thwart civic authority, thereby endangering a community. Instead of aiding in securing respect for and obedience to the rules of his sanitary colleague he joins in opposing him. Candor must compel us to admit that too often he fears the advent of the health official may mean some disclosure of his own incapacity. It is fair to say the official on his part is often too ready to give advice, to sneer at diagnosis or rail at treatment. To inspire, therefore, wholesome respect toward these coworkers and establish an *esprit de corps* should be one of the educational prerogatives of this section. Were we to be called to account for duties undone, the sin of not fulfilling our obligation to the community in sanitary matters would doubtless be found the most conspicuous, the one most detrimental to its interests.

Again, if not too insistent, could not this section further educational exhibits in sanitary matters not unlike the superb exhibit last winter in Baltimore, conceived and conducted in the main by our present official of the Sanitary Section? The Association could not do better than issue a grant for the furtherance of this object.

THE SCIENTIFIC EXHIBIT.

It is gratifying to see the interest and success attendant on this new feature of section work. It is another tribute to the belief in the permanent tenure of office of an official when we have the good fortune to get a good one. Attention is particularly called to this exhibit to ask the Association and the other sections to look to the conduct of somewhat similar exhibits. The Section on Ophthalmology showed the possibilities at the time of the Helmholtz anniversaries. When a section takes up a subject let us not have the clinical, pathologic and therapeutic aspects alone discussed, but bibliographic and historic features brought out. Let such features be as national as possible. What a fine exhibition it would be to have in connection with, say typhoid fever, a loan collection of the pictures of authors and investigators, of the various editions of their works and of the material things with which they worked, illustrating the evolution of their knowledge of the subject. Who would not be thrilled by a picture of the wards of the old Pennsylvania Hospital where Gerhard worked, of the instruments or materials he worked with, how he lived and what he did; of the first editions of his works, indeed of the manuscript of them? We must confess to a quiver of delight, mingled with reverence, when permitted to handle the manuscript on which Stillé inscribed his communication to the Paris Society. This is not the time or place to indulge in a homily on the value of such exhibits, agreeable though it might be. Through them, as of biography and sculpture and painting ,we keep in touch with our history. Foster efforts in these directions, gentlemen of the Association, grant liberally to sections their small demands on you, to the end that you will be stimulating the best instincts in our profession.

THE ASSOCIATION OF LIBRARIANS.

We are not far amiss when we call attention to an organization which in a quiet, unobtrusive way is bringing together the members of the profession on a common ground, where tares do not spring up and thistles do not blossom, but instead in an atmosphere clear, refreshing, invigorating. Jealousies do not thrive in libaries; books soften ambitions. No stronger, more liberal friendships can develop than those that come to book lovers. We owe a debt of gratitude to the Li-

brary Association and to its distinguished president, under whose fostering care the influence and power of the Association is unfolding as the hardy rose, exhaling like it a fragrance which cheers and stimulates. Of the many abundant works we owe him none, we venture, will be more satisfying to him and more lasting for good than the work of the Association of Librarians. This Association should hold not its hand nor stint its heart in upholding its educational efforts.

THE RUSH MONUMENT.

Before this session adjourns, by proper ceremony, graced by the presence of the President of the United States, with an oration befitting the occasion by our distinguished colleague, Dr. Wilson, the monument erected by the Association to the memory of Benjamin Rush will be dedicated. The Association is to be congratulated on the completion of this tribute in perpetual bronze to one of the most distinguished of our countrymen. Not alone should we rejoice on the fruition of this agreeable task but also because it augurs for the erection in the future of tributes to the memory of others full worthy of our reverence. The invigorating, stimulating influence that comes from having about us our heroes of the past in stone or bronze behooves this Association and its constituent bodies to strain every effort to encourage in this manner hero worship. It is due ourselves to perpetuate the inspirations, the thoughts, the feelings in the counterfeit presentment of our fellows. We are not of those who decry the world because it has not recognized our Jenner, our Pasteur, our innumerable heroes either by reward in their life time or by permanent tribute. We do not begrudge the mead of praise and the plenteous bounty which flows to our warriors and statesmen. It is true, their glory has been attained often by carnage, lives sacrificed to avenge some insult. It was not life that was at stake. It was principle or thought or feeling or, our misanthrope suggests, greed. What countless lives are sacrificed for aspirations; what thousands of innocents for national gain! So, to the actors who stand for such, unstinted regard is given. The public neither appreciates the loss nor the saving of life. Hence, so long as it does not come close to them, civic murders from bad hygienic conditions do not move them. Even when home is devastated they submit to that which they consider mystifying or providential, and merely go their way. They are callous beyond measure to the presence of epidemics. They do not consider for one moment the power they have to assuage the virulence or even wipe out the existence of pestilence. Every effort for amelioration, as we see in tuberculosis, comes from our profession. With such lack of appreciation of their own welfare we need not expect much appreciation from them of our efforts.

In all honesty, we must admit among ourselves, we may not deserve public appreciation. If we realize the truth we may make amends. Could the public be expected to revere and respect when, as usual in the past, perhaps too common now, the profession was divided against itself, not from principle but generally because of pocket, of sordid ambition, of devouring jealousy? Look ye to your county societies! Do the brethren dwell together in harmony? Go to the warfaring court rooms! Do we emerge from them respected and respectful of one another? Until such sores are healed, as they happily will be, when science—and hence liberality of mind and largeness of heart—is furthered by associations like ours, it must remain to us a cherished heritage and privilege to worship our heroes alone. When we learn to respect ourselves, then will we be respected.

MEDICAL EDUCATION.

The object of this Association shall be for the purpose of elevating the standard of Medical Education.

This Association has been, should be, and we trust will be the storm center of legislation for reform in medical education. Since the memorable editorials of Wood in the old *Philadelphia Times*, and the masterly papers and addresses of Pepper and the practical action of the University of Pennsylvania there has been virile progress. In most respects it seems definitely settled as to the course of education a candidate for the degree of medicine should take. Questions of pedagogy are still debatable, but we take it that that student who wishes the quickest returns, the most lasting remuneration, perennial stimulation of the intellect and continuous enjoyment in the pursuit of his labors, should take a college education of three or four years, a four years' course in medicine and, if possible, a hospital interneship.

Reference need only be made to the reports to this Association, to the famous report of the majority committee of the Association of American Medical Colleges, to the numbers of THE JOURNAL comprehensively devoted to education, and to many recent admirable addresses in support of the statements.

There is talk about maximum and minimum requirements, about laboratory and hospital courses, the merits of didactic and clinical teaching—a mass of material brought forth from the viewpoint of the educator, or looking to the welfare of the medical profession. We do not minimize the value of such lines of discussion. It has brought us to the position we have attained. But what of the medical student? Should we not look at education from his point of view? Is he quite able to decide whether he should take up the profession of medicine? We hold that a great duty is due the aspirant for medical honors from teacher and practitioner. It is a kindness due him to point out the best methods of securing such education as will yield him results commensurate with the time and expense required. It would be a greater kindness to be enabled to show him that by reason of intellectual temperament or of physical or moral qualities he is not likely to reap the rewards he is anticipating.

The large majority of medical students do not have a good reason for studying medicine. They are ignorant of the mental and physical demands made on them. They are attracted by an uncertain glamor and a specious glory, and heedlessly they go in. The failure of a large percentage of graduates in medicine to acquire more than a bare existence, and too often not even that, proves that they were not educated properly, not fitted temperamentally nor physically, to pursue its duties. Should they not have opportunity for learning of the responsibilities and difficulties, rather than to have the brighter phases glorified? Would it not be well to have in our college curriculum a course of lectures for the student who contemplates entering a profession, pointing out the rocks and shoals in his prospective career? An eminent practitioner, not connected with medical schools, would light up and darken the pathway in due proportions. Then, too, should not, as in the Army and Navy, some physical tests be required? The trophy is to the robust, and sad will be the career of the man who is physically handicapped.

If there were any doubt about the value of a college

degree to a man entering the medical profession it could be set at naught since the report of the Mosely Education Commission. Quotations like the following, while not pertaining to medicine alone, the result of extensive inquiry and mature deliberation, supported by the statistics they give, uphold the contention of a large employer, that "for 99 per cent. of the non-university men, it is hopeless to expect to get to the top." One opinion they express is that "there is still room for the boy of marked ability 'to come through,' but that his difficulties are greatly increasing, and that, useful as he is, his usefulness would have been greatly enhanced had he had the benefit of a college training." Still another commissioner reports that while only "1 per cent. of the entire population of America has received a higher education in her colleges and universities, this 1 per cent. holds more than 40 per cent. of all positions of confidence, of trust and of profit." It is well known that the "geist" of the individual brings success, for which they say "it is recognized that the educated man takes in a wide horizon and puts more 'soul' into his work."

The essential of success in any department is diagnosis, which requires powers of intellectual penetration and discrimination. President Thwing has again forcefully urged that "the reasoning of the mathematics—and mathematics is only reasoning—tends to promote *clearness* and *accuracy in perception, inevitablenss in inference,* a sense of logical *orderliness.* The study of the languages represents the element of *interpretation.* The study of history means the interpretation of life." Are these not the main studies of a college education? While they may promote scholarship, they surely cultivate thought. It need scarcely be pointed out to this audience that to be a thinker is the salvation of the physician.

To the plea that the acquirement of a college degree takes up too much time and requires too much money, the material answer can be given from other sources to the effect that "the men whom you are surprised to find holding such important positions in factories, though not much over thirty years, are the very men who did not leave the technical college till they were twenty-three or twenty-four; the graduate may have been twenty-five before he donned a jumper, but in five years he learned more with the college training he had as a foundation than the regular journeyman of fifteen years of actual work in the shop." The experience of teachers who have watched the alumni agrees in that the college graduates get quick returns and soon acquire a position of independence.

The poor boy, therefore, need not be deterred, for if he has the spirit and energy to work his way through four years, two years or three years more will be but very little in the final summing up. If the student only knew that the purchase of the best education, whether reckoned in time or money, was the most economical investment, in that as to the former, a thorough education at first is time-saving in later years, and as to the latter, the money outlay is returned more quickly, in more immediate work and larger pay.

There should be one educational requirement—the equivalent of that for which a first-class college degree stands, whether received at a high school or university.

After entering the medical school with, it is presumed, the proper educational attainments, his career the first year should be closely watched. That school has too many students if it does not have enough instructors in the first year to be able to judge with a reasonable degree of accuracy of the character and moral stability of the men. This is not to be taken in a prudish sense or with too critical a scrutiny of habits which are the overflow of the animal spirits or the expiring exuberance of the boy approaching manhood. This can be said that a student who does not play fair in his exercises, who cheats in one demonstration or evades another, who does not show manliness, frankness and truthfulness in his first-year duties, will not be a good diagnostician. He will cheat himself; he will cheat his patient. The teachers of the first year, or at least the second, should know this and block the student there and then. It would be a kindness. Let us then agitate whether we should not have a certificate of manliness, a certificate of health as well as a certificate of mental proficiency, before we admit students to our medical schools or permit them to go beyond the first year. Let us not be decoys, alluring them on to later destruction, but rather be guardians, wrapping the strong arm of experience about them to lead them to the fitting pathway.

Having permitted the student to pass further in his pursuits, we still owe him much. We must see to it that such course is given him the first two years of his student career that he will acquire such fondness for the science of medicine, such reverence for the exploration of its truths, that until his dying day devotion to it will be his stimulus and solace. As a corollary, we must insist that medical schools secure the best men in the market for these places and pay them salaries commensurate with their ability—good living salaries.

It is in the first and second years of his career that the foundations are laid whereby the student becomes the medical thinker. To quote again: "The power of thinking should not be of a base and barren character. The thinking should represent and be concerned with a fine and rich content of knowledge. It should have the exactness of intellectual discrimination; it should have the fullness of noble scholarship; it should embody a culture which is at once emotional and esthetic and ethical, as well as intellectual."

That a desire to relieve suffering, to extend sympathy, to save life, is the impulse of the physician, we all admit, but where is the man among us who will not also admit that a scientific habit more quickly brings it about and more surely sustains and fortifies the humane instinct through the trials and tribulations of exacting practice? That prosecution of professional duties soon becomes commercial that does not have for its basis a true spirit of scientific inquiry. How miserable must that life be which conducts an exacting, drudging, daily routine with only material reward in view. Few are the practitioners who have this sordid view; we can be as sure medicine would soon be forsaken if this viewpoint alone were considered. Hence in the laboratory of the first two years must be aroused and fostered the stimulus for lifework.

The final years should be clinical years, and the last should be in a hospital. The medical school that allows its students to think such opportunity is not due them is most unfair to them. As our schools are now constituted, most of them can not give such requirements. The students should know, however, such requirement is necessary. What has been said regarding the preliminary college education applies equally forcefully to the hospital training. He is thrice armed who enters the arena thus equipped. Medical schools that can not give such education are cruelly un-

kind and unjust to the students by having them think it is not essential. Medical colleges that pass off a hospital training for one that is not truly such, fake their students. The student who pays well for his training has the right to demand such as to fit him for immediate action.

It is not the fault of the medical school alone that he can not get it. The public that cries out when there is mistake in diagnosis, fault in treatment, and that shakes its head at the deficient education of our students, must share the blame with the medical school. The public admits that its individual members may at any moment almost be at the mercy of a half-educated physician. It is not necessary to recount, for it is well known, how on land or sea, by day or night, some event may arise in an individual life, the care of which may mean life or death. Even with this knowledge they withhold means to relieve themselves. They admit the necessity of a hospital training. But they, and particularly the public in control of hospitals not used for teaching, say each medical college should have its teaching hospital. They do not appreciate that to give an education which involves a hospital course would require an expenditure of $500 a year for four years by each student. It has been estimated that the cost of maintaining a plant and paying salaries sufficiently large to accommodate 600 students would require the above outlay by each student. Unfortunately, it is impossible to expect students to pay such figures, as it would render entrance into the profession almost prohibitive. It is manifestly impossible, as medical schools are constituted now, to educate all the students of the land properly. Hospital training can not be given except by a few favored institutions, because the doors of hospitals are closed either by the governing body of the hospital or by the teachers in the medical schools.

We believe, personally, if a decree should be issued that no medical school, including its hospital, should exist except on the fees derived from students, but little hardship would follow. The lessened supply of students would increase the demands on the practitioner, so that larger returns would follow. The poor student would sacrifice and strive to get a degree, knowing then he had a good asset. A diminution in number and an increase in quality is demanded alike by the public and the profession. Such diminution in number would mean that the student would get back his investment quicker and in larger amount than at present, hence good men would be attracted. If we could abolish sentiment for sense and educate accordingly, there might be betterment all around. As it is now, medical students receive part of their education through the bounty of the state or the charity of the public, as such education can only be given in endowed institutions. The public is taxed so that the prospective physician can make a living. Is it right that it should be? Perhaps a mechanic should demand such right to make his son a good workman. We must all admit it is the duty of the state to educate the youth, so that good citizenship is maintained; we can question whether the state should educate the members to obtain a livelihood.

With the same indifference that the public views an epidemic's march they allow hospitals that are engaged in teaching to suffer for the want of funds. Moreover, they close their doors to the advent of teaching in the hospitals under their control. We must admit those who do not appreciate the true function of a hospital have some ground for their contention. Ruled by sentiment chiefly, unfortunately an impracticable master, they sympathize with the patient who still harbors the belief of old that the medical student is one of a class that prowl about not unlike harpies. The public does not realize the difference in the student of to-day and the student of tradition. We can not hold to account the governing body of the hospital who has the point of view that it is harmful to a sick person to have them under the surveillance of an alleged student rabble. We must admit some patients become alarmed, particularly in institutions where they know they will have the sympathy of the governing body. An analysis of motive will show that the usual patient who will not allow a judicious amount of clinical demonstration when the sense of delicacy is not offended, is truly selfish, in that there is prevented that increase of knowledge and development of skill whereby suffering of others may be alleviated. A little encouragement from the officials would allay alarm on the part of the patient. The desire to help others is infectious, and when one yields in a ward, others vie in the work.

The truth of the matter is that in hospitals in which teaching is carried on, rarely, if ever, do the patients complain. Indeed, it is the experience of those teaching institutions that judiciously conducted instruction is appreciated by the patient. In one hospital we might name most of the inmates are pay patients, giving $7 a week willingly, because they know they are buying the services of the best practitioners in the land—the teachers of medicine—which service they could not get at tenfold the figure. The fact that teaching hospitals are overcrowded, not by the poor alone, but by people independent of charity, shows that clinical instruction is not a bugbear. If the governing boards would know that while a few patients might be alarmed, on the whole most of them would be gratified by the attention paid them, and their sense of rectitude and manliness appealed to by the satisfaction that they are doing some good in enlightening students, so that others could be relieved; that their administration would be stimulated to do work beyond criticism; that the nurses would be aroused to better activity while under the observation of those not connected with the hospital; that the internes would do their very best to have most complete studies of the case, and finally, that the chief in attendance, compelled to do his best at the risk of his reputation, they would gladly open their doors, even at the discomfort of the few, but to the advantage of the many. In short, the hospital should have teaching not to oblige the medical school, but for its own survival and regeneration. The benefits the student derives by the object lesson of an orderly hospital can not be estimated. Will not every member of a hospital board admit that his own character, his own sympathies, have been benefited by his connection with the hospital, even though, perhaps, he has not the advantage of an impressionable age? Can he not see, therefore, how the youthful student can be influenced in thought and character and feeling? He can not lightly toss aside this responsibility, nor even hide it by putting the onus of medical education on the teaching hospital. Every dollar endowing a non-teaching hospital robs the teaching hospital which is engaged in this larger duty.

It is true a class who are compelled to have hospital attention may not sympathize with this feeling. How can we obtain the confidence of this class? Let us organize such association of prominent people in our teaching centers who will agree to have any operation,

any feature of disease witnessed by medical students, at the judgment of their attending physician. It would be well if the individuals of such an organization would agree, first, to undergo hospital treatment; second, to be the object of observation by students; third, to have an autopsy performed in case of untimely end. Such association would rob hospitals of their terror and teaching of its dread. No one can deny that on the whole the public would be benefited from whatsoever point of view we look at it. Indeed, the public ought to learn that disease is an enemy to themselves and their country. Just as we make sacrifices in time of national warfare, so we should be willing to make sacrifices in the daily battle for life. Just as aristocrat and plebeian, landlord and tenant, fight side by side in the former, so they should array in solid phalanx in the latter.

But there are hospitals willing to admit students, and yet the privilege is not availed of. This arises because the teaching force of the medical college is not willing to sink its personality and allow the student to go wheresoever he will for his instruction. Courage and some sacrifice is required perhaps. But, when one thinks of the mighty opportunity and the frightful waste, it is saddening. Every hospital should be a school. The fourth year should be so arranged that the student could avail himself of the advantages of hospitals in the immediate vicinity. Let each teaching body have the student understand what he must see and do, and trust you the true student will see it at the best place and with the best men. He must be accountable, of course, with a rigidity that means the exact acquirement of knowledge. To this end the first two years could be well spent in the properly equipped laboratory university, whether in town or country, the third in the authorized hospital of the school, the fourth in extramural hospital work.

Is it not anomalous that the hospital boards give to the nurses who are to act as aids to the physician the highest opportunities, and yet deny it to those who are to give orders to the nurses? This, of course, arises because training schools are the product of modern thought and have not been trammeled by tradition.

But all this talk of the primary education avails but little if we do not see to it ourselves that education is continuous; that from the day of our graduation, forwards, we do naught but toil, toil, toil. It should go without saying, as a mere business proposition, that unless we unceasingly labor but little of the fruits do we pluck. It is demonstrated in a practical manner, for when we look about us and find the methods of those of our brethren whose labors are not in vain each one bears the scent of midnight oil.

The development of post-graduate schools, the growth of libraries, the groans of the printing press, the enthusiasm of medical societies, all testify to the spirit of persistent self-education that is abroad. It is not for me to urge further the importance of each of us taking from time to time months for study and reflection. Every active doctor should have his sabbatical year. We dare say, extended observations would uphold that in income a gain is one hundredfold for each dollar invested in educational outings, and for every hour thus employed, ten is added to life. To finance a medical man from first to last successfully, we dare say spend all net earnings of the first five years on self-education; 25 per cent. of each five years for further education; after ten years, 10 per cent. of the annual net earnings for an assistant, continuing the 25 per cent. investment each five years. Health, happiness, increased usefulness to the community—a success which never comes from eccentricity, equal to doubling capital every ten years, would follow. To this must be added the great mental satisfaction of a more clairvoyant vision in the prosecution of his daily duties, the inspiration that comes from the doing of things, the stimulation that arises from the solving of problems.

In the course of our work it is necessary for us to halt from time to time and review. Few of us are they who will not find as our days grow fuller an unconscious tendency to slight our work, to become slipshod, to hurry over matters. It is partly an evidence of overwork. The post-graduate school is the salvation. No obstacle can withstand the continuity of drill, which the earnest of us keep in action. If, to continue the imposition, asked what element of character is perhaps lacking to the greatest detriment to the profession and public, we possibly, one and all, would say courage. This is seen in the hesitancy which members of the profession show in giving an opinion, in advising an operation and in asking for an autopsy. How much confidence is destroyed by the want of free, frank avowal of the physician that he does not know on the one hand, or of clear, precise statement of his judgment concerning a case on the other! The greatest success in life is confidence. How many lives are lost by the worker in internal medicine not advising early and unequivocally an operation for fear he might be wrong in his diagnosis! And how many more are lost because the surgeon lacks courage to do, either because he fears the patient may die and his record be marred, or because he may operate when it is not necessary! We must admit we have had some operations done when they were not required, but let it be said to the credit of modern surgery, we have never seen an operation of such character performed by the right man that did any harm to the patient. On the other hand, the resort to operative procedures early, and in cases that even yet are not considered of surgical relief, has saved lives and lessened suffering to a degree that far overbalances the now and then futile measure. It may be assumed, without contradiction, that every case of bad appendicitis that happens to get well without surgical relief has in its wake three to five that die for the want of an operation. In other words, the pernicious influence of a surgical case that recovers without operation is evident in creating the hope that other cases demanding operation might get well without it.

And the man who does not want an autopsy—not only the centers of courage need stimulation, but too often the entire medical storehouse needs refitting. Something, best known to the physician himself, we trust, is lacking in the one who treats an obscure case for a day, six days, six weeks, and then does not want an autopsy. If true to himself, true to the demands of his profession, courage will not fail him. In our mental and physical round-up, we must see to it that courage is given a new backbone from time to time.

But, fellow members of the Association, not alone as members of this organization may we indulge in self-congratulation, but as members of a profession whose limitation knows no bounds, we may join in felicitation. Neither language, nor creed, nor country fetters our profession's munificent sway. The thoughts of Ehrlich in Frankfurt, of our own Welch or Councilman, of Kitasato in Japan, are correlated. The knife of Mayo in America, of Robson in London, of Kocher in Berne contributes to the relief of suffering in far Cathay. The founts of Lister's genius and Pasteur's divine inspira-

tion bring countless blessings to England, to India, to France and to Africa. What a stimulus it is to realize that, howsoever small the contribution of the humblest of us may be, its impulse will be felt in climes near and far and ages present and remote! What awe can not but overtake us when we consider each heart throb we study entwines us to Harvey of two centuries ago; with every percussion tone reverberates the sound of Laennec's voice of a century; with each vaccine inoculation, the simple observation and reasoning of Jenner to stimulate our question and deductions!

We rejoice together and cherish our history, by the warp and woof of which we are woven to the past. What heritage for us and our children! Dead must be the soul that wearies of communion with the spirits of the past; deep must be its slumber on which falls the thought of centuries; lethargic its activities that are aroused not by the deeds of heroic men! "Honor and fortune exist to him who always recognizes the neighborhood of the great, always feels himself in the presence of high causes." We worship together our science, devotion to which brings forth character, smothers egotism, levels pretension, drives out solitude, develops such loftiness of thought which can see that "against all appearances the nature of things works for truth and right forever." Of our art, let us see to it that when the final summons comes it can be said of us, "Greater love hath no man than this, that a man lay down his life for his friends."

Orations.

PROGNOSIS; ITS THEORY AND PRACTICE.

ORATION ON MEDICINE AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY, JUNE 7 TO 10, 1904.

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The topic I have ventured to bring before you is "Prognosis; Its Theory and Practice." As a text, let me quote from the oldest work we have on this subject,[1] which, though old, still has the freshness and modernism that genius gives to human productions:

It appears to me [said the Father of Medicine] a most excellent thing for the physician to cultivate prognosis; for by foreseeing and foretelling, in the presence of the sick, the present, the past and the future, and explaining the omissions which patients have been guilty of, he will be the more readily believed to be acquainted with the circumstances of the sick; so that men will have confidence to entrust themselves to such a physician. And he will manage the cure best who has foreseen what is to happen from the present state of matters. For it is impossible to make all the sick well. This indeed would have been better than to be able to foretell what is going to happen; but since men die, some even before calling the physician, from the violence of the disease, and some die immediately after calling him, having lived perhaps only one day or a little longer, and before the physician could bring his art to counteract the disease; it therefore becomes necessary to know the nature of such affections, how far they are above the powers of the constitution. Thus a man will be the more esteemed to be a good physician, for he will be the better able to treat those aright who can be saved, from having long anticipated everything, and by seeing and announcing beforehand those who will live and those who will die, he will thus escape censure.

In this Hippocrates describes the essential importance of prognosis to the patient and the physician in relation to treatment. Besides this, prognosis is often important to relatives and dependents, not merely for reasons of sentiment, but in order to protect property and prevent unhappiness and destitution that would be as painful for the patient to contemplate as for the others to suffer. There is another aspect not present in the time of Hippocrates—giving the patient an opportunity to prepare himself for the anticipated life beyond the grave. In many cases, too, prognosis may have important bearings on political parties or for the commonwealth.

The patient very often ignores these needs. If he asks for anything, it is usually either the name of the disease or that of the medicine the physician intends to use. He really understands as little of the significance of the name as he does of the action of the drug, and is often more quickly satisfied in proportion as both answers are occult.[2] What really should interest him is, as clearly as his mental development permits, some idea of the changes in his body, anatomic and functional, their present seriousness, the chances of death, or of complete or partial recovery, with, in the latter case, the probability of temporary or permanent disability, near or remote, in some organs or functions.

Within the last century prognosis has lost some of its relative importance. Unlike etiology, diagnosis, prophylaxis and treatment, it has no special literature, and is only occasionally the subject of addresses or essays. But much of the so-called prognosis of the earlier periods was really diagnosis, as in Hippocrates' vivid description of empyema, and his remarks in regard to other diseases of the respiratory organs. It also seems a mistake to assume that practical prognosis was more accurate at any period than in later ages of equal enlightenment. While we may admit that great masters, like Hippocrates himself, Galen, Sydenham and Boerhaave, were remarkably accurate in their prognostications, there is no reason for thinking that the rank and file, following their rules without having their keenness of observation and precision of reasoning, were more accurate, or as accurate as physicians of a later period when the formal study of prognosis was neglected, but when other means of knowledge were greater than before. We must bear in mind a fundamental difference in methods. The older prognosis was based on the observation of symptoms alone, and consciously or unconsciously took the standpoint of humoral pathology or some equally imperfect theory. One charge against ancient prognosis is not as serious as some have thought, viz., that the prognosis was made without a definite diagnosis. Even now we sometimes have to be satisfied with a very imperfect diagnosis, and yet may make a very good prognosis, at least for the immediate future. But the older prognosis was almost wholly lacking in anatomic, and totally without chemical basis. Realizing how far short of accuracy the diagnosis must have been in many cases, we can understand that prognosis must have failed al-

1. The Book of Prognostics; the genuine works of Hippocrates, Adams' translation, vol. i.

2. Striking examples of the virtue of mysterious names are conspicuous in the practice of the popular sect of osteopaths. I could give many examples of the license with medical terms among these people, but as the evidence is derived wholly from patients I cite only one that can be vouched for by medical eye-witnesses. A hospital patient with typhoid fever, with the neck pain not infrequently felt in that disease, requested that his osteopathic physician be allowed to treat him. I was not unwilling, especially as the osteopath gave assurances that he would not attempt to treat the typhoid fever. Two internes "assisted" at the treatment. The osteopath, one of the *sang azul* of his class, after feeling the neck, announced that the transverse processes of three cervical vertebræ were displaced on one side. After some manipulation he pronounced the displacement relieved, though I was sorry to see that the pain was not much less than before.

most as often. Moreover, in early medicine, most attention was paid to acute diseases, or the acute terminations of chronic diseases, so that the many important chronic diseases that now make so much of medical practice were comparatively neglected.

Whatever shortcomings medicine may have—and those who cultivate the subject most thoroughly feel the needs most deeply—it must be admitted that diagnosis is much more certain than ever before. Not only are we able to distinguish more quickly and more accurately many diseases long known, such as some of the acute fevers, malarial disease, tuberculosis, diphtheria and pneumonia; but we have learned the existence and the means of detecting many diseases formerly confused with others. As examples, let me name only a few, such as the diseases originating in the vermiform appendix and the gall bladder, diseases of the pancreas, many diseases of the blood, a large number of diseases of the nervous system and of the ductless glands, and many diseases caused by animal parasites, of which the sleeping sickness is the most striking example at present.

The older prognosis, far from being negligible, is really of fundamental importance. It gives the accumulated experience of ages that, untrammeled by detail, carefully noted broad and elementary features of disease. As gathered together in the aphorisms and prognostics of Hippocrates, and in the numerous commentaries on them—not always improving the original—it furnishes a fund of inestimable value, but like everything else in medical art, this knowledge is less useful when applied mechanically than when worked over in the crucible of personal experience, tested by other methods and transposed into current formulæ.

Older prognosis was possible to collect into fairly circumscribed space, but this is no longer true.[3] In proportion as diagnosis has become subdivided, specialized and enlarged, and as knowledge of morbid processes has become more complex, so prognosis has become more intricate. Older prognosis was based on broad symptomatic lines, qualified in practice, we may be sure, by a consideration of the patient's constitution. The present basis is diagnosis, but of a different kind. It means not merely a recognition of the name of the disease, but a knowledge of the nature of the disease, still incomplete, but rapidly gaining in fullness and accuracy. In many cases we know the causes, and a good deal of the nature of the causes; in many more we know the seats of the disease, and the anatomic, chemical and functional changes that result directly and indirectly. It is by the study of the altered functions that we can make a prognosis and plan useful treatment without knowing the name of the disease. Clinical and anatomic investigations have been aided by experiments and observations on lower animals, without which our knowledge would have been much less certain than it is. Scores of technical methods have been devised for reactions and explorations; natural forces previously unknown, such as the *x*-rays, have quickly been pressed into service. Long and painstaking observations have thrown much light on complications and sequels, their nature and detection. From all these things the prognosis proceeds naturally in most cases, but here again an indispensable part is a just recognition of the patient's constitution. It is probably true that in this connection we unduly neglect some prognostic aids furnished by the patient, such as changes of the physiognomy. But, on the other hand, we have much more accurate methods of ascertaining the constitutional factor than were formerly available. Constitution is still a somewhat vague term, but we can speak of it here as the result of the functions of all the organs. While the method of representing these functions is still inadequate, we can safely assert that we have much more accurate means of determining the condition of the heart, arteries and veins, and the force of the circulation than we had before; we have gone considerably beyond the recognition of the apoplectic habit in foretelling the danger of vascular disease. We can usually estimate fairly well the efficiency of the blood-forming organs; we can determine with reasonable accuracy the capacity for work of the stomach and intestines, as well as a few details of nutrition and metabolism; we are rapidly getting beyond the limitations of Falstaff's water doctor in fixing the anatomic and functional ability of the kidneys, and we are working toward methods of testing the functions of liver, muscles and nerves. When we have all these factors thoroughly investigated it is probable there will be little need of the *vis medicatrix naturæ*, now an essential part of prognosis.

In the conclusion resulting from these things there is no room for a supposititious clairvoyance, an intangible gift of prophecy, a hypothetic intuition that trained intelligence can not equal or industry surpass. We have a positive foreknowledge, a prescience, a prognosis, corresponding in accuracy and usefulness to our diagnosis, and often in advance of our treatment.

In the foregoing I have spoken of the theory. In the practical use of prognosis the first to profit by that function is the physician. With an accurate prognosis, based on exact and thorough examinations, knowledge of the natural course of the disease and of the patient, the physician foresees the course of the malady and is prepared for changes, emergencies and complications. He is thus enabled not only to preserve his imperturbability, so essential in carrying out necessary measures of treatment, but he can also prepare the patient to meet coming events in better physical and mental condition than otherwise, and, what is often of even greater importance, the self-confidence thus shown stimulates the efforts and the compliance of others concerned in the case.

It is not easy to say how much the patient should share this foreknowledge, and how it should be conveyed to him. In many cases the patient does not ask an opinion, and in many others, either because the present disease seems too slight or for other reasons, the physician does not proffer one. Yet it is good mental discipline to work out the prognosis in every case, as a complement to the diagnosis, and in many the results should be stated to the patient. Many things may conspire to make such statements act either favorably or unfavorably on the patient as on the physician.

Physicians, like other people, can often be classified as either optimists or pessimists. Not that these tendencies affect all parts of the individual's activities. One may be a perfect Pangloss in sociologic, political or climatic matters, and yet take a gloomy view of all his patients. (I am not speaking of those who, rarer in the profession than in some of its parasitic growths, habitually exaggerate the danger of their cases, making every angina a diphtheria, every erythema an erysipelas and every bronchitis a threatened pneumonia). Another who is perpetually cast down by the failure of democratic government or the need of a stronger one, the

3. I have not attempted to include prognostic details, but would refer those interested to "Observations on Prognosis," by P. H. Pye Smith, Guy's Hospital Reports, vol. xliv, 1887, as one of the most comprehensive and suggestive articles in modern literature.

immorality of the rich and the rule of the bosses, may meet every case with hope and cheer.

But the practice of prognosis should be cultivated as objectively as any other part of medicine. Not only the therapeutic indications suggested by it, but also the human ones, should be carried out without fear or timidity, without unnecessary harshness, but also without the false benevolence that often does more harm than brutal frankness or ignorance. Here, as in other departments of medicine, the welfare of the patient must be the touchstone by which the action proposed should be proved.

No disease should be looked on as insignificant. Nothing seems less becoming than to hear medical men speaking lightly of disease in general, or of any disease in particular. It is no consolation to the mother whose child has died of one of the rare complications of chickenpox to find that many physicians think that too trivial to concern themselves with it. Nor does it increase confidence in the profession to have hysteria and neurasthenia considered imaginary and ridiculous evidences of perversity, while the impatience, not to say lack of scientific interest sometimes shown toward other less well-defined neuroses, undoubtedly has some relation with the crowded ranks of followers of "isms" of all kinds.

In acute diseases the best general rule is still that of Hippocrates (Prognostics; 19, sect. II): "In acute disease it is not quite safe to prognosticate either death or recovery." A case of this kind, however, should not be considered likely to die unless from a complication, or from the effect of a pre-existing disease, though in certain diseases, such as scarlet fever and diphtheria, the danger of a sudden change and of death should be made known in the beginning. Of course, in cholera and plague, and even in cholera infantum, such information is rarely necessary. In some other acute diseases the study of prognosis prepares the physician not to be unduly elated by the remissions that are so reassuring to relatives. The temporary amelioration in meningitis and peritonitis, in which the patient seems almost free from symptoms, may be mentioned. Less disappointing, but still ominous, is the occasional lull in bronchopneumonia. But in the cases I have just mentioned it is rarely advisable to bring the unfavorable probabilities too strongly before the patient. In these we often need the effects of reassurance and of hope. For the latter as we see it in medical practice is not merely the "kind nurse of old age—hope—which," as Pindar says, "more than aught else steers the capricious will of mortal man," in acute cases especially it is distinctly stimulating to physical and mental processes. Sir Dyce Duckworth,[4] speaking from a ripe experience, recently gave an address on "Hopefulness in Medicine," in which he emphasized this fact, and Niemeyer, equally successful in his career, at his medical promotion defended among others the thesis *medicus semper hilaris*. On the other hand, it is a serious error not to point out, after recovery from certain acute diseases, the possibility of sequels, sometimes months or years afterward, and the advantage of examinations at intervals for the purpose of detecting them before they become inveterate. The thorough examination of the urine at intervals after scarlet fever, of the lungs after pleurisy and all bronchitic diseases, of the heart and arteries after many infectious diseases, often has great practical value.

In chronic diseases there are few exceptions to the rule that the patient should be told the nature of his case as fully as possible. At least, in patients who can be made to understand, and who have a possibility of recovery, of definite improvement or of long duration, there are only individual exceptions. Patients with tuberculosis, heart disease, kidney disease, and disease of the alimentary tract can not get the best possible results unless they understand why and how they should do certain things and why they should avoid others. Tact and patience and a knowledge of human nature are essential in this. The statements made should be as simple as possible, as brief as definiteness permits, without pathologic explanations. Better no statement than an unconsidered or an unintelligible one.

In talks of this kind we too often forget how different are the ideas of non-medical persons, even those who have studied physiology in the public schools, from our own, regarding the body, its functions and diseases. I am always interested in seeing how soon medical students lose the lay point of view, just as one forgets an unused foreign language, and how sometimes they never recover it. Yet unless they do, they lack valuable means of giving aid. Darwin has noticed how everyone who studies profoundly a subject often becomes unaware on what points the ignorant require information. Carlyle, as John Beattie Crozier tells us, imagined his stomach as some old teakettle, thickly encrusted with fur, and I have seen an otherwise intelligent man on the point of using strong sulphuric acid for a cough, because he found by experiment that oil of vitriol dissolved sputum more quickly than any other reagent he had tried. Nor is it enough to make the explanation. We must ascertain whether the statements are understood, and, if possible, whether they are accepted. How often, even with an intelligent individual, after we have stated the existence of a small tuberculous focus, and described the results of rational treatment, we find the patient shutting himself in a dark and close room, taking "lung cures," cough syrups and more or less medicated cod-liver oil, and how often, after demonstrating the sufficiency of dietetic treatment in a digestive disease, we find the patient taking bitters, digestive ferments, usually well neutralized by alcohol, antiseptics and other drugs less easy to classify. So time and patience must be devoted to this part of the work, and we should never be discouraged by failure. I am convinced that there is an improvement in the possibility of carrying out rational treatment, notwithstanding the insidious propaganda of useless or dangerous methods in and out of medical journals.

It is much easier to advise in cases that have a strong tendency to recovery than in those that have not, and there is room for difference of opinion and of practice in the latter, because the conditions vary with patients according to individuality and accidental factors. A number of aspects present themselves for consideration. In the first place, there is often an element of diagnostic or prognostic uncertainty, where the prospects are better than they seem. Sir Dyce Duckworth[5] has formulated universal experience in pointing out the advantages of the "cautious 'if,'" and if the alternative accepted is the hopeful one, much good can be accomplished in many cases. An interesting example is given by Kussmaul in his fascinating "Jugenderinnerungen." Having made a reputation as a zealous dissector, and having won over his confiding peasants to the many

4. Duckworth, Sir Dyce: Opening of University of Liverpool Medical School, British Medical Journal, Oct. 3, 1903.

5. Duckworth, Sir Dyce: Address on Medicine, British Medical Journal, 1896, ii, p. 251.

advantages of postmortem examinations, he was asked by the father of a girl with advanced tuberculosis of the peritoneum to arrange for an autopsy on the daughter, when she died. Although Kussmaul, too, thought the daughter was lost, he retorted that he could not speak of an autopsy until the patient was dead. Notwithstanding many obstacles, the girl recovered. The tendency to take the less hopeful alternative is still shown in some cases of tuberculous disease in stages not far advanced, though it is not so common, fortunately, as it was not many years ago, to see such patients given over either to a life of dissipation or of abject despair. The prognosis of valvular disease of the heart is also in a much more optimistic vein than it was fifty or even twenty-five years ago. However, in many cases the prognosis needs to be tested by a therapeutic "if" that is not as well recognized as it deserves. The physical conditions may seem hopeless, and yet if the action of the heart can be improved the case may assume a very different aspect. The advantages of trying were well illustrated by a case in which a woman with aortic and mitral insufficiency and moderately severe loss of compensation was given up as beyond treatment by her family physician. Not knowing this, I told the relatives the impossibility of complete recovery, the danger of sudden death or more probably rapid failure at any time, but also the possibility of improvement and a fairly comfortable life for some time, all the more worth trying to realize, because the condition was not complicated by medicinal action, and the other important organs showed no serious alteration. The family physician then wrote me admitting that he had stated improvement was out of the question, and treatment not worth trying, although under subsequent treatment the patient lived two years and nine months.

In cases hopeless in a more certain degree than such as I have just mentioned, it too often happens that treatment is abandoned too early in the case. Patients with cancer of the stomach or other inoperable tumors, cirrhosis of the liver, and many other diseases are permitted to drag out their existence without relief. There are several reasons for this. Sometimes families, having been told the truth about such a patient, refuse all further medical aid, even when the conscientious physician who gives the information points out what can still be done.

Many physicians voluntarily discontinue attendance when they realize that the end is inevitable, with the feeling, doubtless, expressed by Sir William Temple. The latter said that "an honest physician is excused for leaving his patient when he finds the disease growing desperate, and can, by his attendance, expect only to receive his fees, without any hopes or appearance of deserving them." This, however, ignores the fact that in such cases the accomplished physician can often do more real good to the patient than in many cases that recover, while the opportunities for obviating despair, alleviating pain and soothing mental anguish, and for exhibiting thoughtfulness, gentleness, persistence and variety of resources, are more valuable to the physician than any fee. Even in acute cases it sometimes happens that the physician is either discharged or withdraws because the indications seem hopeless, and I have known of patients with pneumonia living for one or two days in this way, the family waiting for the end of a life that with greater effort might have been saved. Sir Francis Bacon described this tendency as one of the deficiencies of medicine, "so that Sylla and the triumvirs never proscribed so many men to die as physicians do." For, as he continued, "the office of a physician is not only to restore health, but to mitigate pain, and not only when such mitigation may conduce to recovery, but when it may serve to make a fair and easy passage."

Improvement in methods of treatment have an important relation to prognosis, in that many diseases considered hopeless at one stage of knowledge, may in another offer many chances for recovery or alleviation. In this connection a critical knowledge of current medical literature is necessary, and a realization of the value of medical evidence. Few things can be more disastrous to the physician's mental development—never completed—than constant change of therapeutic method, but there are differences. One need not try every drug proposed for the treatment of typhoid fever or pneumonia, nor every new antipyretic or hypnotic. But the physician who does not inform himself quickly of the value of surgical treatment in various disease as it is developed, in pelvic diseases, brain diseases, diseases of the appendix, biliary tract, stomach and pancreas, comes very near deserving the reputation of an unscrupulous practitioner. In these departments, too, mistakes are made and exaggerations are inevitable concomitants of progress, but the gain is often distinct and unmistakable, and often changes the prognosis from one extreme to the other.

It may seem that I have taken a too purely medical view of the practice of prognosis. Can we always act from the standpoint of simple diagnosis and prognosis, or must we not at times take into consideration the weakness, fears and prejudices of people? In trying to get the best light on this subject I have for many years noticed the opinions of patients and their relatives, as well as of non-medical writers, and it is instructive to learn how those who are not physicians approach the subject. Many physicians have been influenced by the views of Percival, from whose interesting work on Medical Ethics some of the best parts of the old Code of the Association were taken. Percival said:[6]

> A physician should not be forward to make gloomy prognostications, because they savor of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely warning of danger, when it really occurs, and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming, when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy, for the physician should be the hope and comfort to the sick; that by such cordials to the drooping spirit he may smooth the bed of death, revive expiring life and counteract the depressing influence of those maladies which rob the philosopher of fortitude and the Christian of consolation.

In general, this furnishes a useful guide to conduct, but nevertheless requires some examination. Part of it reminds one of the maxim of John Halle, who as far back as 1596 wrote:

> With one consent uniformlye
> Comfort the wounded man,
> But unto some good friend of hys
> Express all that you can.

In the first place, the truth is not always so alarming to the patient, painful as it often is to the physician. In fact, it seems to me this is one part of our duties that does not become less trying with increasing experi-

6. Medical Ethics; or a Code of Institutes and Precepts, adapted to the professional conduct of physicians and surgeons, with an appendix containing a discourse on hospital duties; also notes and illustrations, by Thomas Percival, M.D., Manchester, 1803, p. 31.

ence. To the sick man, whose thoughts have been turned toward the end longer than others suspect, intimation of a fatal end often brings no shock, but rather relief from the ending of a painful uncertainty. According to the rules of the Roman Catholic Church, a timely announcement should always be given, and those who have witnessed the last days of members of this faith can confirm the statement that good often follows, speaking merely from the medical standpoint, and rarely harm, while the same thing is true of many of other faiths or of no faith. Even where we have to give a fatal prognosis there are certain mollifying influences that can be introduced, aside from those that spring from a tender heart. A hope can be expressed based on the fallibility of human knowledge in general and medical knowledge in particular.

The rule in regard to giving the patient a good prognosis and the relatives a bad one, can often be followed, but is a very fallacious one on the whole. It is often more necessary to keep up the spirits of the relatives, especially those who have to nurse, than those of the patient, so that sometimes the rule can be reversed with advantage. Darwin[7] cites some interesting and instructive examples of this kind, from his father's practice, and Billroth[8] has expressed himself with much feeling in one of his letters. Moreover, the relatives informed, either from a feeling of compassion or otherwise, may not bring the patient to act on the information, and I have known of serious financial loss befalling a family because the relative entrusted with the task of breaking the news to the patient did not do this. Another risk is that the relatives may divulge the fatal prognosis in such a way as to put the physician in the light of a heartless deceiver, and thereby cause the patient to lose all confidence in him. On the whole, in cases where the patient should know the truth the physician is often the best one to state it, and he should see that this is done before it is too late.

Exceptions to the rule of candor may occur in the case of children, in women with no spiritual obligations or business responsibility, or in exceptional cases in men. No general rule can be laid down, but that such exceptions occur can be confirmed probably by every physician. A striking example of this is quoted by Darwin.[9]

Of course, this part of the subject is closely related to the theory of ethics, and many writers on this subject have touched directly on the question of medical veracity with, as one might anticipate, diametric differences of opinion. Some moralists of the strict school of Kant and Fichte insist that any deviation from the absolute truth is wrong in medicine, as they assert that it would be wrong even for the purpose of saving the whole race. Others believe with Paulssen, who says: "There is not a physician in the world who does not give deceptive answers to his patients, who does not excite hopes that he does not share. He does not blame himself, nor do others, for everyone does the same." Johnson, "the stern old moralist," in his remarks on the subject, laid open a serious flaw in his own logic: "You have no business with consequences, you are to tell the truth." But surely the physician's chief interest is with the consequences, and if he thinks the patient can gain only by misrepresentation, it is just as proper for him to use it as it would be to give a medicine that in other cases might be quite improper. But the physician in such a dilemma would do well to bear in mind the next sentence in Johnson's *ipse dixit:* "You are not sure what effect your telling him that he is in danger may have. It may bring his distemper to a crisis, and that may cure him." Jonathan Dymond, as strict as any one in his morality, threw a gleam of stern humor into the discussion: "Persons frequently employ falsehoods to the sick man who can not recover, lest it should discompose his mind. This is called kindness, though an earnest preparation for death may be at stake on their speaking the truth. There is a peculiar inconsistence sometimes exhibited on such occasions. The persons who will not discompose a sick man for his interest in futurity, will discompose him without scruple if he has not made his will."

This part of the discussion might be indefinitely prolonged, but I think we can never get far away from the principle I intimated in the beginning—that in practical prognosis we must individualize, just as we have to in therapeutics, with the patient's welfare ever the object of our activity.

Accidents that follow an unfavorable prognosis occasionally suggest a revision of methods. I have already alluded to the error formerly not uncommon in the treatment of tuberculous patients. More acute results sometimes follow a fatal prognosis, as in two of my patients who resorted to suicide. One was a man with far-advanced carcinoma of the stomach, to whom I recommended palliative treatment and advised against a useless effort at radical treatment. The patient left for his home, but threw himself from a fast train and was killed. In another patient, a man with a large kidney tumor, apparently with many adhesions, my surgical colleague and I advised against an operation. The patient went to another hospital, and apparently received similar advice, for he shot himself through the tumor, and died in a short time. From a broad biologic standpoint it does not, of course, make any difference whether an individual organism dies as either one of these, or as it would if left to its fate. But no matter

7. The Life and Letters of Charles Darwin, edited by his son, Francis Darwin, New York, 1887, vol. i. "Called in to see a patient who had been given up to die by the family physician, Dr. Darwin took a different view of the matter and maintained that the man would recover. He was found quite wrong in all respects, and owned his error. He was convinced that he should never again be consulted by this family, and was much surprised at being called in after a few months by the widow. He asked a friend of the widow to find out why he was again consulted. The widow answered that she would never again see the odious old doctor who said from the first that her husband would die, while Dr. Darwin always maintained he would recover. In another case Dr. Darwin told a lady that her sick husband would certainly die. Some months afterward he saw the widow, who was a very sensible woman, and she said, 'You are a very young man, and allow me to advise you always to give, as long as you possibly can, hope to any near relative nursing a patient. You made me despair, and from that moment I lost strength.' 'My father,' continued Darwin, 'said that he had often since seen the paramount importance for the sake of the patient of keeping up the hope, and with it the strength, of the nurse in charge.'"

8. Briefe von Theodor Billroth, 1902: Speaking of the slow decline of Professor Breisky, and of the attending physician telling the whole truth to the wife, he remarked: "I admit that under certain circumstances this is necessary; but here I do not think it is necessary. How can the poor wife, without a glimmer of hope, bear the weeks until the liberator of all sorrows gently approaches the husband. We should give her courage, and the poor patient morphine. A hard task. But let us remember that every family physician is in this situation hundreds of times, and often has to see his incurable patients daily. If the young man suspected these mental tortures when he enthusiastically enters the temple of Æsculapius he would surely often turn back. To face the unveiled figure of Sais requires all the undaunted resignation that we slowly win in our profession."

9. *Op. Cit.* "He was sent for by Mr. P., who said 'From all that I have seen and heard of you I believe that you are the sort of man who will speak the truth, and if I ask you will tell me when I am dying. Now I much desire that you should attend me, if you will promise, whatever I may say, always to declare that I am not going to die.'"

how one may feel on the subject of suicide, I have always thought these men less fortunate than another patient with carcinoma of the stomach, also far advanced. To him, in advising against an operation, I added that if he could find a good surgeon who was willing to operate, he might submit. He underwent the operation at the hands of one of the most distinguished surgeons in the country, and died on the table. In such a case the result is often unfortunate, because it prevents operations on other and more promising cases, but for the man himself, fighting to the last, it seems to me one can have only respect.

This brings up a question on which a few words may be proper—the question of euthanasia. Every few months some one—usually not a physician—proposes that people with incurable diseases should be killed by some painless method. The plan offers so many opportunities for crime that it would be difficult to carry out, but aside from that it involves important principles. The difficulty of telling when the proper time had come would often be insuperable. Aside from examples of fortitude and other virtues exhibited by the dying, how much the world would have lost if a chronic invalid like Stevenson had the cord of his life snapped at one of the times when the *aes triplex* of his soul seemed battered through! To take a less selfish view, we can think of the "pictures of human patience, the visions of ripened character, which have been revelations and inspirations to generations of mankind" (Phillips Brooks), and see these repeated daily in sick rooms of all degrees, while the self-sacrifice and kindness developed in others at such times can not but be of untold benefit to the race. To most physicians the suggestion of any planned shortening of life must be abhorrent. For countless generations they have been doing their utmost to lengthen life and lessen disease. They have shown how to prevent the plagues that formerly made life almost as bad as a perpetual illness for the survivors, and they have also shown how many deaths can still be prevented. On the other hand, they can, in most cases, so treat the dying man that the bitter anguish often associated with death is absent, that life is not only less painful, but actually longer, so that they will continue to follow the rule of the Father of Medicine, and "give no deadly medicine to any one, even if asked, nor suggest any such counsel."

THE ASSOCIATION OF SURGICAL LESIONS IN THE UPPER ABDOMEN.

ORATION ON SURGERY AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, AT ATLANTIC CITY, JUNE 7 TO 10, 1904.

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The history of medical advance from the empirical treatment of symptoms to scientific expectancy, has been based on the study of death and modern research work. The spirit has been fine, although somewhat pessimistic. The great advances have been along the line of preventive medicine and in the elucidation of problems connected with the etiology of disease.

Surgical progress has been, to a certain extent, through similar channels; the spirit, however, has been one of magnificent optimism. The great advances in surgery have come from the clinical side, modern technic having enabled examination of primary conditions during life.

As a groundwork for the study of medicine the pathologic laboratory and autopsy room offer unrivaled advantage, but they teach end results only. Who of us has not admired the precision with which a trained observer makes a diagnosis? A few days later one visits the autopsy room and here observes that this almost clairvoyant analysis was correct. At the same time, we must also acknowledge that the patient has not profited; it means a hundred pages of pathology and two meager lines of treatment. How many times do we notice in the autopsy revelations that the original lesion has been but slight, and at one stage easily curable, the pathology present largely the result of secondary complications and terminal infections?

The postmortem has been an institution for years, yet what did we know about appendicitis until surgery led the way, or about gallstone disease, supposed to be an "innocent postmortem finding," until operation opened up the field? Did knowledge of extrauterine gestation come from the autopsy? By no means. It was through the surgeon's knife, and why? Because secondary conditions so often mask the original lesion at the postmortem. On the contrary, our understanding of acute conditions causing sudden death has been brought about by dead-house investigations; for instance, fatal hemorrhage and perforation placed acute gastric ulcer on a sound foundation. Not so chronic gastric and duodenal ulcers with late death from complications, cholangitis from gallstone disease, and chronic pancreatitis from the same cause. These conditions could not be correctly studied, excepting after death from accidental cause, and real progress lay dormant until surgery invaded the field.

From research work we have profited much; we are gaining rapidly by this means day by day, but we can not compare the animal to the man, nor can we always artificially create similar conditions. Like the postmortem, it has its limitations, yet these two fundamental methods have enabled us to advance. Without them we would still be in the middle ages. Now the time has arrived, in the light of these investigations, to view conditions from a new standpoint at a time when the lesion is in its infancy, long before the postmortem, while the patient may be benefited and the research work applied to the elucidation of living problems.

The medical man must haunt the operating theater as he has haunted the autopsy room and the laboratory. The times have changed; we must have more treatment and less pathology. It is here that surgery wins its triumphs. We must not forget, however, that to physicians of pathologic training we owe the knowledge which enables us to approach the subject. Courvoisier was the real father of gallstone surgery. It was Balzer, Fitz, Opie and others who cleared up the pathology of pancreatitis, and surgery followed their lead. It is in the union of the internist and surgeon that progress is most rapidly made, and in the readjustment of science the former will be the architect and the latter the master builder.

Once more the physician and surgeon will come together, and the mistakes of endeavor in new fields will receive timely correction at the hands of the pathologist and experimental worker.

The surgical borderland of to-day lies in the upper region of the abdomen, a locality until recently considered almost purely medical. What are the reasons for this invasion, and have the results justified the attempt?

Surgery must be judged on three grounds: First, the

mortality of the operation itself and the question whether this is greater than under the expectant plan; second, the permanence of cure contrasted with medical treatment; third, the question of disability, either introduced by the operation itself or the natural length of time which the healing process involves. On each one of these considerations we must answer yes, and we can go still farther and say that earlier operation would reduce the mortality and increase the permanence of cure and lessen the disability.

Certain parts of the body are so closely related in their anatomy, function and pathology as to be almost necessarily considered as part of the same system. The generative organs of women form so distinct a field of work as to have built up a specialty. Can we separate diseases of the kidney from the ureter, bladder and urethra? By no means. Each may stand in an etiologic relationship to the others which can not be ignored.

In the upper abdomen we have attempted to study the stomach independent of the associated organs, the liver and bile passages, the duodenum and pancreas. The result has been a confusion in diagnosis and treatment. The palm of a hand may cover a serious lesion of any one of these organs, and that, too, at the point of greatest liability; not only so, but any one of this group may start a pathologic process which may extend to any one of the others, and with fully as great frequency as occurs under similar conditions in either the generative or urinary systems.

Note the disturbance of the stomach which occurs with gallstone disease; the adhesions to the duodenum and the pancreatitis, an association direct as it is vital. Again, let me call attention to chronic ulcer of the stomach with adhesions to the pancreas, secondary ulcer of the duodenum adherent to the bile passages or gall bladder. These are not fanciful pictures, but drawn from every-day work. I have no hesitation in saying that with an operative experience of over 1,400 cases of this description, mistakes in exact diagnosis are still common, and in many instances unavoidable. The history may be the only valuable diagnostic resource when the patient comes to us, and we all know how unreliable that may be. Given a history of painful attacks which have been very severe, but which have completely ceased, with tenderness on deep palpation in the epigastrium, and we may have disease of any one of these four organs, and not infrequently an association either direct or indirect of the pathologic process. If we clearly understand the possibilities of error, we are better prepared to meet complications or execute a change of front and operate on one organ when another procedure was planned. In the majority of cases a pathologic diagnosis is possible, and one can say with certainty, "This is gallstone disease," or "This is ulcer of the stomach"; but in a considerable minority a surgical diagnosis is the best that can be made. That is, we can say: "In this locality is a diseased process which requires operative treatment, the exact nature of which must be determined by incision." The patient does not come to us for the purpose of having a certain operation performed, but seeks relief from suffering and disability.

Let me call your attention for a few minutes to the anatomic diagram, showing the nearly vertical position of the stomach with the pylorus in the middle line of the body, and but little elevated above the lowest point of the gastric cavity. It is turned upward and to the right just enough to prevent the weight of the gastric contents bearing directly on the sphincter apparatus. The only portion of the duodenum in which we are interested is the four inches lying between the pylorus and the papilla of the common duct of the liver and pancreas. This may be called the vestibule of the small intestines. Its position subjects it internally to the perils of ulcer from the acid gastric juices which its thin tunics but inadequately resist. Externally its function is often interfered with by adhesions to the gall bladder and bile tract, secondary to gallstone disease. This unoffending bit of intestine is so often offended against as to cause it to become the most frequently diseased portion of bowel of the same length. The remaining eight inches of the duodenum is protected by the alkaline secretions of the pancreas and liver. Its fixed position and peculiar horseshoe shape, with its delivery point nearly as high as its origin, enable it to mechanically slow the ingested material during the mixing process for which its large caliber affords accommodation.

The anatomy of the bile tract is equally interesting, and especially the relations of the common liver duct to the pancreatic duct and the duodenum. There is continuity of mucous surface, each protecting itself from the secretions of the others by the mechanical washing effects of its own secretion, the joint discharge and a feeble sphincter apparatus preventing entrance of the duodenal contents.

The gall bladder, as it furnished the initial lesion in more than one-half of the diseases of this group, is of great interest. Like the appendix, an obsolete organ of storage function and limited outlet, it gives rise to a variety of troubles, which we are only of late beginning to appreciate. It is an old aphorism that "Nature finds mischief for idle hands to do." The gall bladder has a capacity of about an ounce, and as we find almost universally in organs of storage function, the neck is raised slightly above the lowest point to prevent the weight of contents resting directly against the outlet. The little pouch thus formed may be called the pelvis of the gall bladder (Brewer). It is here that the obstructing stone is so frequently lodged in cystic impactions. Murphy observes that the fundus of all organs has but few lymphatics, while the region of the neck has an abundant supply; hence, even with septic contents, there is but a mild reaction when the pelvis is obstructed, as compared with the startling temperature curves of duct stones.

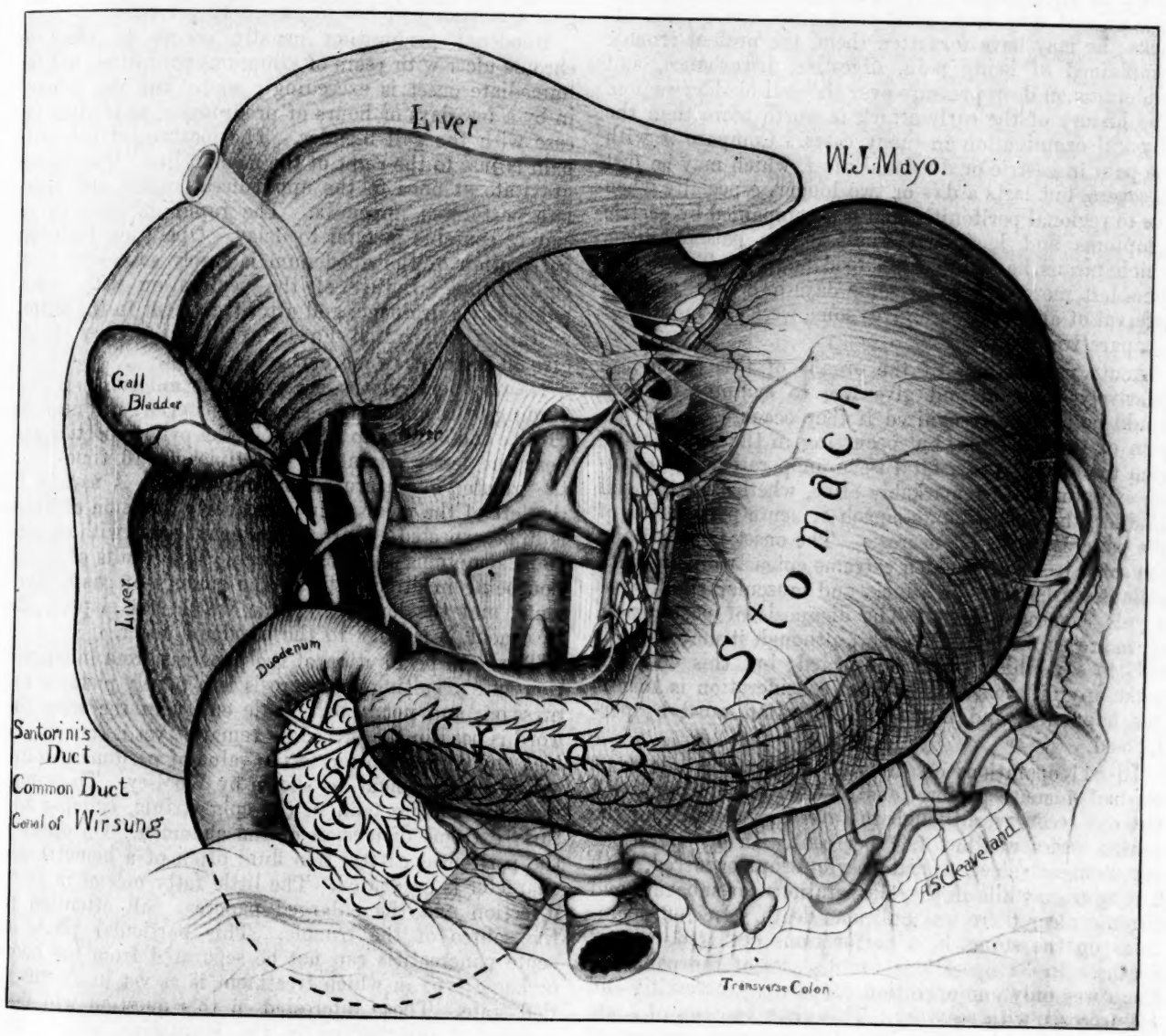
The pancreas, composed of two originally separated parts, has in nearly half of the specimens which have been examined two patent ducts, that of Wirsung, which is the important one, uniting with the common liver duct. The minor duct of Santorini, however, has a possibility of useful function in certain diseased processes, as pointed out by Opie. The pancreas was originally an intraperitoneal organ, becoming retroperitoneal by a later evolution (Huntington), and in this anatomic peculiarity Brewer believes lies one of the reasons for the diffusion of fat necrosis resulting from acute pancreatitis. Mikulicz has called attention to the fact that adhesions to the pancreas in gastric cancer gave a mortality of 73 per cent. in his resection cases. Robson also notes the pancreatic mischief occasioned by perforating gastric ulcer on the posterior wall.

The blood supply of this group of organs is almost entirely from a single source in the celiac axis. It has been experimentally developed that the severance of all connections of the pancreas excepting its blood supply, does not check secretion if food is placed in the

gastro-intestinal tract. In the nerve supply from the pneumogastrics and sympathetic ganglion, we find the same direct relationship involved. If we study the function we see the same association. The stomach can be compared to a mill, the fundus the hopper, in which the food is macerated in a weak solution of pepsin and hydrochloric acid, and the muscular pyloric portion the grindstones in which the masses are broken up into a homogeneous whole. The entrance of food into the duodenum causes the outflow of biliary and pancreatic secretions, the absorption returning to the liver by way of the portal vein. This is so elementary that you wonder that I should refer to it, yet the causation of the common surgical lesions lies in perversion of these fundamental functions, and is just as simple. Mechanical injury of the pyloric portion and excessive acidity of the gastric secretions, under anemic conditions, give rise to ulcer and lie behind the precancerous lesions which Ochsner notes is found in the history of cancer of the stomach in the majority of cases. The acidity of the gastric secretions renders the contents of the stomach, when turned into the intestine, relatively sterile, but increases the liability of ulcer of the duodenum. The sterility of the upper intestinal tract is still further increased by intestinal absorption, as shown by Adami, the bacteria being picked up and destroyed in part by the glands. Many germs are, however, carried to the liver, and here either annihilated or screened out of the blood in the portal vein and discharged with the bile. We must look on the bile as always containing a few bacteria, and it is probably this attenuated infection of bile retained in the gall bladder which gives rise to gallstone disease, which in turn is the chief factor in the production of duct inflammation of both the liver and pancreas.

These considerations, so briefly outlined, taken in conjunction with the embryologic origin, justify the grouping of *the surgical lesions of the upper digestive tract,* and at once enable the diagnostician to associate the symptoms and the surgeon to direct his attention, not to one, but to the entire group of organs. The burden of proof lies with the practitioner, not only to demonstrate that the disease rests in one organ, but to differentiate and show that no other is involved.

The art of the diagnostician lies in the proper valuation of the signs and symptoms of disease in organs of associated function and pathology. The instinct which seems to lead some men to a correct conclusion, and by a mental process they could not themselves analyze, usually depends on few things, the immaterial or in-



conclusive evidence being unconsciously discarded. For instance, note the value of the colic in the diagnosis of gallstones. The typical attack comes on and stops abruptly, is relieved by vomiting or a feeling of movement of gas, is irregular in time, in regard to food, and not accompanied by temperature or pulse elevation, and leaves the patient able to attend her duties almost immediately after cessation of pain. While the pain lasts, it is excruciating, felt in its greatest intensity in the epigastrium, radiating upward behind the sternum and into the back. The distress penetrates to the right side, but occasionally to the left, and lasts from a few minutes to six or eight hours. When the patient comes to the physician it may have been years since the typical attacks; he may have forgotten them, the present trouble complained of being pain, digestive disturbance, and tenderness on deep pressure over the gall-bladder region. The history of the early attack is worth more than the physical examination in many cases. Compare it with the pain in gastric or duodenal ulcer, which may be just as severe, but lasts a day or two longer, especially when due to regional peritonitis, and is accompanied by gastric symptoms and local tenderness. The patient diets, which means he reduces his food supply. The symptoms last more or less for some days or weeks, and the interval of apparent cure gives some weeks or months of comparative health.

Acute perforations of the organs of this group are relatively common and give rise to symptoms which would be at once recognized if they occurred in the region of the appendix, but occurring in the upper abdomen too often go to a fatal issue unoperated. The initial symptoms are remarkably alike, whether of the gall bladder, the duodenum, stomach or acute perforation of the pancreas with fat necrosis. The onset is essentially the same in each. Sudden extreme epigastric pain, with collapse, ushers in the attack, and muscular rigidity, as a rule, comes on early. The diagnosis of perforation, if we are on our guard, is easy, although it may be difficult to say which organ is affected; but this does not make any difference. The vital consideration is that it has happened, and immediate operation must be performed.

In 811 operations on the gall bladder and bile tract we had 4 acute perforations of the gall bladder, with but one recovery, although the average mortality in the benign series was but 4.47 per cent. In 45 operations for duodenal ulcer, 4 acute perforations occurred, with 2 recoveries, while in the 41 operations for subacute and chronic ulcer there was only one death. In 469 operations on the stomach, 5 perforations occurred, with 2 deaths. In 32 operations for diseases of the pancreas, there was only one operation for acute pancreatitis and fat necrosis, with recovery. This gives 14 cases of acute perforation, with a mortality of 50 per cent., and why? Because the operation was usually too late. The death rate in over 1,150 operations for subacute and chronic benign conditions of this group of organs averaged a little less than 5 per cent., counting as a death from operation any patient dying in the hospital without regard to cause or time elapsed between the operation and the fatal issue. If we add to this mortality of 50 per cent. in operations for acute perforation, the cases seen in a moribund condition beyond even attempt at relief, and the still larger number in which death occurs without an ante-mortem diagnosis, we get some idea of the appalling nature of the disaster. To be successful, operation must be immediate; the condition is as imperative as hemorrhage from an artery of the third class. Few recover operated on later than ten hours after perforation. The conditions simulating perforation in the upper abdomen, such as thrombosis of the mesenteric or splenic vessels, diaphragmatic and duodenal hernia with strangulation, and so forth, are rare, and likewise call for early operation.

As a rule, the history and location of the early acute pain will furnish evidence as to the origin of the trouble. Preceding perforation of the gall bladder there are often symptoms of several days' duration with a history of gallstones. The acute pain occurs in the gall-bladder region. Early drainage with removal of the gall bladder should give a mortality of not to exceed 10 per cent.

Duodenal perforation usually occurs in cases of chronic ulcer with years of symptoms preceding; but the immediate onset is exceedingly acute, and not ushered in by a few days or hours of prodromata, as is often the case with the gall bladder. The location of the early pain is just to the right of the median line. The liquids gravitate at once to the appendiceal region and simulate perforated appendix. The rapid diffusion of escaping contents is fatal to delay. Operation for acute perforation of the duodenum is rarely successful after eight hours. Suture of the perforation with suprapubic pelvic drainage, and after-treatment in the sitting posture (exaggerated Fowler's) in early cases should give 80 per cent. or more of recoveries.

Gastric perforations occur on the anterior wall, according to Brunner, 7 times to 1 posterior, and near the cardiac end 5 times to 3 times in the pyloric portion, and near the lesser curvature 122 times to 16 times near the greater curvature. The initial pain is usually to the left of the median line, and early diffusion of fluids is to be expected. Only 10 per cent. occur without previous symptoms of chronic ulcer. The results of operation being in direct ratio to the amount of gastric contents, and the length of time which has elapsed, the treatment is similar to the duodenal ulcer.

The term perforation of the pancreas from inflammation with resulting fat necrosis is a purely pictorial expression, and not a pathologic entity in the sense the word is used in the preceding remarks, yet it conveys the idea and calls attention to the value of peritoneal drainage in its treatment, as shown by Woolsey. The symptoms are sudden pain in the epigastrium, collapse and early extreme distension of the abdomen. On opening the peritoneal cavity, free fluid often of a hemorrhagic character is evacuated. The little fatty masses in every direction and the enlarged pancreas call attention to the source of the trouble. This particular phase of acute pancreatitis can not be separated from the hemorrhagic type in which treatment is as yet in an unsettled state. Those interested in this question will find a mine of information in the Hunterian lectures for 1904 by Mayo Robson.

The group of acute perforations gives an unsatisfactory mortality, with a prolonged period of disability from drainage, and without a certainty of permanent cure of previous underlying conditions. This will not long continue. Like acute gangrenous appendicitis, the condition will be recognized early with corresponding improvement in results.

The diagnosis of the chronic infective lesions of the organs of this group is in a far more satisfactory condition. The general mortality of gallstone operations is not above 5 per cent., taking the cases as they come, but even this is too high. Grouping the cases in which the

entire process is limited to the gall bladder, the mortality is from 1 to 2 per cent., and depends to a large extent on the general condition of the patient. Secondary complications, chiefly those which involve the hepatic and common ducts with resultant cholangitis, pancreatitis, and so forth, are responsible for the death rate. As practically all of the patients have symptoms on which a diagnosis could be based previous to the complications, it will not be long before early operation in patients otherwise in good health will be the rule as it is now in chronic and relapsing appendicitis. Not only is the mortality thereby reduced, but the disability is likewise lessened. The average stay in the hospital for uncomplicated gallstone patients is slightly less than seventeen days; the convalescence of the complicated duct cases is prolonged one or two weeks.

Chronic infections of the pancreas are usually secondary to gallstone disease, and, as a rule, do not occur excepting where the common duct has been directly irritated by the presence of calculi, although the consequences may continue for some time after the passage of the offending body. The results of drainage of the gall bladder and bile ducts are extremely satisfactory. In our series of 32 cases there were but 2 deaths; these patients had coincident suppurative cholangitis.

Chronic infective lesions of the stomach with ulcer as a type are becoming better understood every day, as surgical operation discloses the actual conditions present. The primary mortality of operations for their relief are in a fairly satisfactory condition, but as to ultimate results we can not say definitely. For the obstructive complications the result of ulcer, there can be no question as to the relief afforded and at a nominal risk. The dilated stomach with retention or stagnation of food suggests at once drainage operations with gastrojejunostomy as the type. We have patients of this description alive and well more than twelve years after operation.

Chronic ulcer without mechanical obstruction gives a less promising outlook. The very fact that there is normal gastric motility indicates that gastroenterostomy or other drainage operation is less necessary. Our results in operations for this description of lesion have not been wholly satisfactory, and furnish a considerable percentage of secondary operations and failures to relieve.

Cannon's experiments have shown the same results. A gastroenterostomy on a normal stomach of an animal does not drain the gastric cavity, even if placed at the lowest point. The gravity advantage of the gastroenterostomy is overcome by intra-abdominal tension, and the food, by muscular action, is carried out the pylorus rather than the artificial opening. The magnificent showing of gastroenterostomy in obstruction has led to the indiscriminate performance of the operation in those cases of ulcer in which gastric drainage is normal. This particular phase of the subject must be further investigated.

Chronic ulcer of the duodenum is relatively more common in the upper two inches than in any corresponding portion of the stomach. It is especially liable to perforate, although its sheltered situation usually leads to adhesive protection. Many pyloric ulcers will be found to have their origin on the duodenal side. Gastroenterostomy is the operation of choice as it diverts the irritating gastric juices and food products from the sensitive surface, thus promoting rapid healing. We have performed gastrojejunostomy 286 times for all purposes, with a mortality of 5½ per cent. in the benign series. The recent improvements in the technic of gastroenterostomy have greatly reduced the mortality and largely eliminated the causes of failure to mechanically relieve the conditions. Moynihan well says that "the surgeon may not unreasonably expect that from being a last resource gastroenterostomy may be considered as a method of treatment worthy of consideration in a much earlier stage of chronic ulcer of the stomach." Excision of gastric and duodenal ulcers would seem to be a wise procedure, but is open to certain strong objections. In 20 per cent. of cases more than one ulcer is present, and one or more may be undetected or lie in an inaccessible situation. It leaves the ulcer tendency unrelieved, and more ulcers may form. Rodman has suggested the removal of the pyloric or ulcer-bearing portion of the stomach with complete closure of both duodenal and stomach ends and independent gastrojejunostomy. We have followed this plan in 5 cases of inveterate ulcer relapsing after gastroenterostomy, with good results. The gastroduodenostomy of Finney is a most excellent operation, and we would predict a wider field of usefulness than it has enjoyed. We have performed this operation 46 times, with one death, and no relapse. The theoretical objection is that in open ulcer the food must pass the ulcerated area before reaching the widened pylorus, and obstruction has no part in the production of ulcer, as is shown by the development of duodenal ulcers. Pyloroplasty must be discarded. While we had no death in 20 operations, we had 7 relapses.

In briefly calling attention to the malignant diseases of this group of organs, the writer would emphasize the possibilities of cure by means of operation. In the gall bladder we found 4 per cent. of cases at the operating table had malignant disease, and all of these cases had gallstones present or evidence that they had been present at one time.

Since it has become the practice to remove all thick-walled gall bladders as useless and a possible source of future trouble, many cases of malignant disease in an early stage have been in this way, as one might say, accidentally cured. We have met with several such instances.

Cancer of the stomach is the most common type of malignant disease in the human body, constituting one-fourth to one-third of the total number. The radical treatment of gastric carcinoma is now on assured ground, with a mortality of 10 per cent., or less in favorable cases, to 20 per cent. in late but still operable disease. The only necessary thing for success is an early diagnosis, and this must be on clinical grounds, supplemented by early exploratory incision. In 46 gastric resections for pyloric cancer we had 7 deaths.

The profession may well look on the surgical achievements in this new field of work with pardonable pride. That there are many shortcomings must be admitted, but in the history of surgery there has never been a territory opened up with equal rapidity, nor one in which the physician and surgeon have worked together in such harmony for the common good. The statistics on which this paper is based represent the operative experience of Dr. Charles H. Mayo and myself.

Our State Medical Societies.—When the importance of these organizations is considered with the good work they are doing we fail to understand, remarks the *Medical Recorder*, how any legal practitioner of medicine can be contented until he has affiliated with his local society. All prejudice should be laid aside and each one should find that his fealty rightfully belongs to his state organization. Don't disqualify yourself by failure to join your local society. Be up and doing.

PREVENTIVE MEDICINE: ITS ACHIEVEMENTS, SCOPE AND POSSIBILITIES.

ORATION ON STATE MEDICINE AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY, JUNE 7-10, 1904.

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The terms sanitary science, public or state medicine, and preventive medicine, have frequently been used as almost synonymous. The latter term, "preventive medicine," however, has sometimes been restricted in its application to the prevention of the infectious diseases. In the broad sense, preventive medicine comprises both general prophylaxis and individual prophylaxis, and applies to all forms of disease, not simply to the infectious diseases. Preventive medicine is an applied science, which deals with the preservation of the health both of the individual and of the community.

No subject more vitally concerns the welfare of a community than that pertaining to its healthfulness. How the inhabitants live and how and at what age they die, what is the extent and character of the morbidity occurring among them and what are its causes, are questions of momentous importance. They are essential features in the problem, whose solution will teach men how they may live longer, healthier, and therefore happier lives.

In rural districts the average healthfulness of the inhabitants depends largely on natural conditions, such as elevation, climate, soil, and, to a much less extent, on the artificial conditions produced by the handwork of man. In densely populated cities, on the contrary, the natural conditions become relatively unimportant features in determining the degree of healthfulness, so much do they become subordinated in many cases to the artificial conditions which have resulted from the lives, labor and occupations of the inhabitants. It may be said with certain limitations that the inhabitants of any city in the temperate zone now have it largely within their power to determine what degree of healthfulness their city shall have. A high morbidity and a high mortality in any urban population depend largely on some remediable features of an unsanitary character, such as the sewerage of the city, the occupations, habitations, food and water supplies, and the habits of the inhabitants—all factors which lie to a great extent within their control. Hence, when any city in modern times has a high annual death rate, for example, 30-35 per 1,000, as was formerly the case in New York, Liverpool and other cities, instead of a death rate of 17-18 or 19 per 1,000, as now exists in London, Berlin and New York, it is because conditions are permitted to exist partly from the neglect, indifference and ignorance of the people, and partly from the lack of proper facilities and necessary efficiency on the part of the authorities.

The achievements of scientific medicine have now placed at the disposal of the sanitary authorities such full knowledge as to the causation of so large a proportion of the diseases producing death, and of the means by which they may be restricted or prevented, that the determination of the average death rate is in their hands. This statement is not, of course, intended to mean that it is now possible to prevent or stamp out local epidemics of influenza, pneumonia, cerebrospinal meningitis and some other infectious diseases, but it is intended to cover the average general death rate of a city for a series of years.

The expectation of life at birth in certain manufacturing cities of England has been but little more than one-half that of the healthiest districts of England. Until recent years it was 25 or 26 years in Liverpool and Manchester, 37 years in London and 46 years in Surrey, a healthy country district. Even at the age of 30, the expectation of life was seven years more for England as a whole than it was for the inhabitants of Manchester. I have estimated that the expectation of life at birth in New York City in 1866 was only a little more than 25 years, while in 1903, calculated on the death rate for that year, it had almost doubled, and equaled about 42 years. For the 7-year period ending in 1873 the death rate under 5 years in New York City was 123 per 1,000 of the population at these ages. For the year 1903 the death rate under 5 years was 56. On the present estimated population at these ages, this reduction equals a saving of more than 28,000 lives annually.

These considerations suggest the vast importance of the healthfulness of the community to the individual at every age, and to the community as a whole, for on this depends not only the relative freedom from illness, but also the probable lifetime of each member.

In the casual consideration of the healthfulness of communities as compared with the conditions existing in earlier times, we are inclined to think without investigation that there has been but little advance in modern times and that while some diseases have been greatly restricted or entirely stamped out, these have been replaced by others equally as fatal to the human race. A little study, however, shows how erroneous are these views. In the seventeenth and eighteenth centuries the average annual death rate throughout the civilized world was at least 50 per 1,000 of the population, and probably it was much more than this. From 1628 to 1635 in London, these years being free from pestilence, the average death rate was 50 per 1,000, and the absolute annual mortality for 24 years, from 1620 to 1643, was over 70 per 1,000.

The death rate during 1902 in London was only 17 and a fraction per 1,000. The mean expectation of life in London for the decennial period, 1771-1780, as calculated by Price's table, was 19.6 years, the annual mortality being 51 or 52 per 1,000; while from 1831 to 1835, although an epidemic year is included, the death rate had decreased to about 32 per 1,000. In 1894 the mean expectation of life at birth for all England had more than doubled that of 1780 in London, so that it was nearly 41 years, and for London alone it was 37 years. From 1771 to 1780 in London not less than five in each thousand of the population died annually of smallpox; in 1810 this mortality had sunk to 2 per 1,000, and in 1835 to 0.8, and in recent years it has been an absolutely insignificant decimal. Fever as a cause of death declined in almost the same ratio, from 6.21 in the decennial period ending in 1780 to 2.64 in 1810, and 1.14 in 1835. In the sixteenth century fever, plague, cholera and dysentery destroyed annually 31 out of every thousand of the population of London, or nearly twice the total deaths occurring now from all causes. These diseases at the present time, as causes of death, do not equal in London 2 per 1,000 annually of the population.

According to the English life tables up to 1875, 518 out of every thousand children in Liverpool died during the first five years of life; 351 died in London and 205 in the healthy rural districts of England, while in the

whole of England 297 out of every thousand died during this period of life. In old New York City (comprising the boroughs of Manhattan and the Bronx), for the seven-year period ending in 1873, 616 out of every thousand children born died during the first five years of life. As computed by the death rate under 5 in 1903, 280 would have died during these same five years. This mortality, while still far too high, equals a reduction of nearly 60 per cent., and as calculated for the estimated population at these ages, means a saving of about 20,000 lives a year in these boroughs. The death rate in the period over 5 years of age has naturally shown a much smaller decrease, although it has fallen from 19 or 20, as it was in 1865 and '66, at the time of the organization of the Department of Health of New York City as at present constituted, to about 14 for the year 1903, being a reduction of nearly one-third. This has been accomplished notwithstanding the fact that the old city has increased during this time from a population of about 750,000 to more than 2,200,000.

It does not seem necessary or desirable for our present purpose to consider in detail the causes of this decrease or the special diseases in which it has taken place, but the facts suffice to indicate the great achievements of preventive medicine during the past four decades. Expressed in human lives, it means, in the boroughs of Manhattan and the Bronx, a saving of over 30,000 lives a year, and, computed at the same rate for the whole city, a saving annually of more than 50,000 lives. I would not be taken as intimating that all of this has been accomplished through the agencies which we usually include under the head of preventive medicine, or that it has been the result solely of the action of the sanitary authorities. Such an interpretation would be very far from the truth, for many agencies have been at work in the production of these results. But preventive medicine, as I conceive its purposes and scope, should include all of those agencies which are essential and direct factors in the prevention of disease and the preservation of life. These agencies are not necessarily all under the direct control of the sanitary authorities.

In these introductory remarks, and in much that follows, I have taken many illustrations from conditions which exist in New York, because I have been familiar with the sanitary affairs there for many years, and the illustrations which it furnishes serve our purpose as well as if selected from many different states or communities.

It has long seemed to me that the work of the sanitary authorities in this country was too much restricted and the general conception of the scope of their functions was narrow and out of harmony with the spirit and development of modern scientific medicine.

Sanitary work has been pretty well limited along certain old and well-defined lines, much to the detriment of the public health. The medical profession has unconsciously contributed no small part to this condition, because of the existence too often of a certain antagonistic attitude toward the action of the sanitary authorities and the feeling that the occupation of a larger field by them would be detrimental to the best interests of the medical profession. The latter has too often resented and opposed any movement to enlarge the field of preventive work, and has often insisted that its operations should be kept within the traditional narrow lines. Until in very recent years the operations of the health officers have been chiefly confined to the measures adopted for the prevention of the more readily communicable diseases, commonly called contagious. These usually included smallpox, diphtheria and scarlet fever, and at intervals, yellow fever, cholera, epidemic dysentery and typhus fever. More recently typhoid fever and measles, and indirectly the diarrheal diseases of infants, have been generally added to this list. But even in regard to the diseases referred to, the measures adopted have been of an elementary and most unsatisfactory character. It must be admitted, however, that until our knowledge of the causation of many of the infectious diseases was rendered more exact by the discoveries in modern bacteriology, sanitary procedures were of necessity largely empirical, and disinfection was either entirely wanting or the methods employed were quite inefficient.

The scope of the sanitary measures in force with reference to the ordinary infectious diseases has in recent years been greatly broadened. More than ten years ago the Board of Health in New York assumed the position that all facilities and procedures looking to the prevention and cure of the infectious diseases should be afforded by the Department of Health. The establishment of the methods for bacteriologic diagnosis and the facilities for the serum treatment had their origin there, and have since been widely followed.

General prophylaxis, or that portion of preventive medicine which should come directly under the supervision of the health authorities, has or should have, a broader scope than that indicated, and should include the supervision, not only of those diseases which have generally come within sanitary surveillance, but also all the infectious diseases which from their nature are to a greater or less extent preventable, in addition to all other forms of disease which are the result of unsanitary living, occupations, habitations or surroundings, including those diseases arising from manufacturing, mining, or other industries which, on account of their nature, are peculiarly or especially injurious to health. It should also include with greatly increased powers and breadth of jurisdiction, the surveillance of the water and food supplies and the sewage disposal.

To return for a moment to the consideration of the infectious diseases to be included in this list, there is a large class of different types of the infectious diseases which are well recognized as being more or less preventable but are not included in the registration returns. These are not dealt with at all by the sanitary authorities, or only to a very limited extent. Mention may be made in this connection not only of tuberculosis in all its forms, whooping cough, mumps, chicken-pox and cerebrospinal meningitis, which have been included in the registration returns by some authorities, but have not, as a rule, been dealt with by them, but also of puerperal fever, erysipelas, pneumonia, the diarrheal diseases of infants, dysentery, malarial fever, influenza, the contagious diseases of the eye, and certain parasitic diseases of the skin, as well as some of the rarer diseases occurring in both animals and man, such as rabies, tetanus, anthrax and glanders.

The inclusion in the registration returns of such a long list of infectious diseases as has been here indicated requires considerable modifications and expansion of the ordinary sanitary procedures, and such action at first thought is likely to arouse opposition and unfavorable criticism from the medical profession. Such opposition and criticism, however, I believe is without proper justification and arises from an erroneous conception of the proper scope and functions of the authorities and their relations to the medical profession and to the people.

There has long existed a belief in the medical profession, and to a considerable extent it has also been a part of the conception of the sanitary authorities of their functions, that the registration of a case of any kind of infectious disease involved some surveillance of such case by the authorities. The slightest consideration would at once show that with relation to many of the diseases mentioned no such surveillance could be of any real service, and it might be a source of annoyance to the sick person, the family and the attending physician. Much good, however, would result, in my opinion, by such a broadening of the scope of sanitary work, without causing annoyance or being detrimental to any one. I should like, however, to point out that more than a year ago the Board of Health of New York City in the revision of its sanitary code included a number of new sections in relation to the infectious diseases, covering to a large extent the diseases above mentioned. These sections, with the accompanying notes, read as follows:

INFECTIOUS DISEASES.

SEC. 133. It shall be the duty of every physician to report to the Department of Health, in writing, the full name, age and address of every person suffering from any one of the infectious diseases included in the list appended, with the name of the disease, within twenty-four hours of the time when the case is first seen:

A. *Contagious* (very readily communicable): Measles, rubella (rötheln), scarlet fever, variola (smallpox), varicella (chicken-pox), typhus fever, relapsing fever.

B. *Communicable:* Diphtheria (croup), typhoid fever, Asiatic cholera, tuberculosis (of any organ), plague, tetanus, anthrax, glanders, epidemic cerebrospinal meningitis, leprosy, infectious diseases of the eye (trachoma, suppurative conjunctivitis), puerperal septicemia, erysipelas, whooping cough.

C. *Indirectly Communicable* (through an intermediary host): Yellow fever, malarial fever.

NOTE.—In this provisional classification of the infectious diseases, arranged for practical purposes, the most readily communicable of these diseases, embracing the exanthemata and typhus fever, have been placed in a group by themselves and called contagious. This has been done with a view to emphasizing a distinction, which is not only of scientific significance, but of practical importance, in dealing with the sanitary features of administration. This distinction is furthermore of importance because it avoids the misunderstanding and alarm frequently caused by including in the same class the very readily communicable diseases (such as smallpox), and the much less communicable diseases (such as tuberculosis), which require very different sanitary measures for their control.

SEC. 134. It shall be the duty of the commissioners or managers, or the principal, superintendent or physician, of each and every public institution or dispensary in this city, to report to the Department of Health, in writing, the full name, age and address of any person suffering from any one of the infectious diseases included in the list appended, with the name of the disease, within twenty-four hours of the time when the case is first seen:

A. *Communicable:* Influenza, lobar pneumonia, bronchopneumonia, infectious diseases of the gastro-intestinal canal (dysentery, cholera morbus, cholera infantum, summer diarrheas of infants).

B. *Parasitic Diseases of the Skin:* Scabies, tinea tonsurans, impetigo (contagious), favus.

NOTE: In this list of diseases reporting is required by the department of health in order that data may be obtained for general and special investigation of the modes and sources of infection and as to the prevalence and distribution of these diseases. The Department of Health does not propose to exercise a sanitary surveillance in these cases, but desires information with a view to the ultimate removal or improvement in the conditions which foster them. Notification is required in certain of these diseases because of the liability to their extension among children in the schools.

It will be noted, first, that two main groups of diseases are specified. In the first group, including the more readily communicable diseases, and some others which are not so regarded, registration is compulsory in all cases coming under the observation either of a private attending physician or an institution. These are separated for convenience under three heads: (*a*) The contagious or very readily communicable; (*b*) the communicable, including diphtheria, typhoid fever, Asiatic cholera, tuberculosis, and a number of others, and (*c*) the indirectly communicable, including only two diseases —yellow fever and malarial fever—which are transmitted solely through an intermediary host. In these three classes compulsory registration is required because in all of the diseases in these classes preventive measures, properly executed, are certainly efficient to a very large extent. As to the propriety of the compulsory registration of all of the diseases included under the first heading, "The contagious or very readily communicable diseases," I assume that there can be no reasonable difference of opinion. Measles, rötheln, scarlet fever, varicella, variola, typhus fever and relapsing fever, certainly without question, should be reported to the sanitary authorities. The necessity for reporting rötheln and varicella rests more in the danger of confusion of these diseases with measles and varioloid, respectively, than because of the importance of the diseases themselves. Our experience in New York has shown again and again that outbreaks of smallpox have resulted from the failure of inexperienced physicians to recognize mild cases, these having been mistaken for varicella and treated as such. Every case of varicella occurring in the city must, therefore, be reported, and all cases occurring in adults are immediately seen by a trained diagnostician. I say all cases of varicella in adults, because experience has shown that very frequently varicella in an adult is a mild case of variola.

In the second class, called simply "the communicable diseases," there might be some question as to the propriety of the reports in some instances. There would be none, however, with regard to diphtheria, typhoid fever, Asiatic cholera, plague, tetanus, anthrax, glanders and leprosy. All of these diseases are under some conditions communicable and of the greatest importance, yet they are much less communicable than the first class, the contagious.

There can not now be, nor can I conceive that there ever will be again, any serious question as to the necessity or propriety for the registration and sanitary surveillance of tuberculosis, although this has been a subject of very bitter dispute, and although this disease has come actually under the close supervision of the sanitary authorities in only three or four cities in the United States, and of practically none in Great Britain or on the Continent. Pulmonary tuberculosis was included in the list of communicable and reportable diseases by the New York City Board of Health ten years ago, and the measures adopted for its surveillance have been gradually extended and the lines for its restriction have been drawn closer and closer as each year has passed. Some doubt, however, might properly arise as to the necessity of the inclusion of other forms of tuberculosis than pulmonary tuberculosis in the registration returns, because for the most part these other tubercular diseases are not communicable, or very slightly so. Bone, joint, intestinal and gland tuberculosis are practically never sources

of infection in other persons, but cases of tuberculosis of the types mentioned indicate the previous exposure to infection of the individual, and they thus point out a probably infected site or family, concerning which the sanitary authorities should have information. Such cases may also disclose unrecognized instances of pulmonary disease. Furthermore, knowledge of all cases is absolutely essential to a comprehensive recognition of the extent and prevalence of the infectious disease, *tuberculosis*. During the past year measures to ensure the registration of tuberculosis in all its forms have been adopted in New York.

The importance of the registration of epidemic cerebrospinal meningitis arises not so much because of the evidence of its communicability as because of the importance of fuller information as to the conditions under which it arises and becomes disseminated. We have in New York City just been passing through an epidemic of this disease, the first serious one for thirty years. During the month ending May 15 more than 300 deaths occurred in New York City from this cause.

The infectious diseases of the eye—trachoma and suppurative conjunctivitis—should be included because of the importance of the adoption of preventive measures in the public schools. Few persons had any conception of the great prevalence of these diseases of the eye in the public schools of New York until after the Department of Health adopted some comprehensive measures for their surveillance. Such a vast number of cases was found that the Board of Health was forced to establish special dispensaries and provide special hospital facilities for their care. Only within a few weeks a second hospital and dispensary has been opened, and in the original one in connection with Gouverneur Hospital an average of about 500 patients a day were treated during the year 1903, and nearly 5,000 patients were operated on for trachoma.

Puerperal septicemia should be included in the registration returns because modern aseptic midwifery has shown that in most instances this is a strictly preventable disease, and excepting rare cases of difficult or prolonged labor, its occurrence may be regarded as the result of uncleanliness, negligence or incompetence. The registration and the investigation of these cases by the sanitary authorities should soon result in the exclusion from practice of incompetent midwives, restrict the work of the criminal abortionist, and foster the practice of aseptic midwifery.

No one, I fancy, would seriously question the propriety of including erysipelas and whooping cough in the registration returns. So far as this country is concerned I assume that typhus fever, Asiatic cholera, plague, leprosy and yellow fever are diseases which will never again call for anything more than occasional or emergency measures for the disposal of isolated cases or small groups of cases. But with reference to one disease in the third class, i. e., malarial fever, some remarks may be in point to show the advantages which are likely to result from the interference of the sanitary authorities. We now all believe that malarial fever is not only an infectious disease and indirectly communicable through an intermediary host, but that it is also distinctly preventable.

The registration of cases of malarial fever should be required, not because close surveillance of individual cases is necessary, but because the sanitary authorities should know where the sites of infection are, where the breeding places of the anopheles mosquitoes are to be found, in order that they may adopt proper means for determining the cause of such areas of infection and the proper measures for their removal. In certain sections of New York City investigation has shown that in some instances almost every person living within certain small areas has suffered from malarial fever during the spring and summer months of a single season. Such outbreaks are without any question the result of local remediable unsanitary conditions, which furnish the breeding places for the mosquitoes. But without special information as to the existence of the cases, only to be obtained through the registration of malarial fever, knowledge of the presence of much unsanitary conditions and their removal, may become difficult or impossible. The surveillance in their homes of the individual cases reported is of course not contemplated. That conditions similar to those found in New York exist in other communities, I have no doubt.

Section 134 of the Sanitary Code of New York, covering the second group, deals with infectious diseases of a somewhat different type, and in these the Sanitary Code requires the reporting to the department by public institutions of all cases coming under their observation; but it only requests physicians to report them and does not require such reporting.

Class (*a*) in this group includes some of the more important acute infectious diseases of the upper respiratory tract, namely, influenza, lobar pneumonia and bronchopneumonia, and certain of the more common acute infectious diseases of the gastro-intestinal canal, namely, dysentery, cholera morbus, cholera infantum and the summer diarrheas of infants.

The acute diseases of the respiratory tract referred to should, in my opinion, be registered, because they are infectious, because they are of prime importance as causes of death, and in order that general and special investigation may be instituted for the collection of data bearing on the modes of infection and the sources and causes of their prevalence and their distribution. New York City has during the last winter experienced the greatest prevalence of these diseases which it has had for many years. In the first four months of the year more than 6,000 deaths occurred from influenza, lobar pneumonia, bronchopneumonia and acute bronchitis.

I firmly believe that these diseases can be to a very considerable extent prevented, but the means and the methods are yet to be determined, and it is hoped that registration will assist in the acquisition of knowledge for the attainment of this end.

A large new field has just been opened by recent observations with regard to the specifically infectious character of many of the cases of summer diarrhea and dysentery, both of infants and of adults. The results of the investigation of the sanitary authorities in recent years in many large cities have shown in the most conclusive way that these diseases are to a very large extent preventable, and it seems probable, or at least possible, from recent investigations, that some forms at least are preventable and curable by the use of a specific curative serum.

Investigations in New York and other localities have shown that serious outbreaks of diarrhea and dysentery have occurred in various institutions and in local areas which were probably, if not certainly, preventable, but concerning which the sanitary authorities have had no information. It seems evident, therefore, that these diseases should be made notifiable. A practical difficulty in this connection exists in the lack of definiteness as to what cases should be included and how the differentiation is to be made between the diarrheas due to

simple digestive disturbances and those of a more serious nature caused by infection. This, however, is a matter for further investigation.

Notification of the parasitic diseases of the skin should be required chiefly because of the liability to the extension of these diseases among children in the public schools.

There are certain very large and important questions of prophylaxis connected with the prevalence of typhoid fever and the milk and water supply of our large communities. The occurrence of great outbreaks of typhoid fever, such as the epidemics at Ithaca, N. Y., and Butler, Pa., during the last year, the prevalence in Philadelphia, Pittsburg and some other cities of the United States and the extensive distribution in the rural districts, constitute a disgrace to American preventive medicine and should arouse the sanitary authorities, the medical profession and the people to the provision of efficient measures and the enactment of suitable legislation for its prevention.

The annual cost of typhoid fever in sickness and death throughout the United States would be computed in terms of tens of millions of dollars. All of this loss we know is certainly preventable. If only a small portion of the annual outlay made by the country for sickness and death from this cause were expended in the education of the people as to the cause and the methods of prevention of this disease and the provision of proper water and sewerage systems, typhoid fever might soon become a rare affection. Unfortunately the city sanitary authorities are often almost powerless in this matter, as their jurisdiction does not extend over the watersheds which supply with water the people under their care, and a supervision by them of the sources of the milk supply is also frequently absolutely impossible.

In New York City detailed investigations of all the cases of typhoid fever occurring within the city limits were instituted several years ago and have been continuously carried on. These show that at least 25 per cent. of the cases occurring in the city have *certainly* received their infection outside of New York City, and a considerable percentage more have *probably* received it outside. Five or 6 per cent. are the result of contact with other cases, and the remainder are in all probability almost wholly the result of infection through milk or oysters. Some more comprehensive measures are urgently demanded to extend the jurisdiction of the authorities in the supervision of the supplies of milk and oysters and other foods.

A serious objection which may be urged against the adoption of the measures here recommended in regard to the registration of many infectious diseases is the increased labor thrown on physicians, which their enforcement would involve. The question may properly be asked: Whether the sanitary authorities in the interest of the general public may call on the medical profession for the expenditure of so much time and labor without making any compensation in return. There are 35 diseases included in the New York list. The English authorities pay a fee for the notification of each case of infectious disease, and I believe that this course might properly be pursued in this country; but this has not been the custom here, and the authorities generally are not now provided with the funds necessary for this purpose.

When the Department of Health of New York City established its bacteriologic laboratories in 1892, measures were adopted to make some return to physicians for their interest and labor in connection with the sanitary surveillance of the infectious diseases. A systematic plan was then inaugurated, and has since been consistently followed, to secure their co-operation, by offering free bacteriologic examination in the diagnosis and surveillance of various forms of infectious disease. This was first applied to Asiatic cholera in 1892, during the outbreak in New York Harbor, and has since been extended to all of the diseases in which existing scientific knowledge made it possible, cerebrospinal meningitis being the latest disease added to this list. The establishment of this system of free bacteriologic examinations in the diagnosis and surveillance of the infectious diseases, and the provision of facilities throughout the city for the collection of specimens and the sending of reports to physicians, constituted an entirely new departure in sanitary work and has been of the greatest value. The example of New York has been followed by the sanitary authorities in most of the large cities of this country, by many state authorities, and by authorities generally, in Great Britain and to a certain extent on the Continent. These examinations constitute the return which the authorities here have made to physicians for the reporting of cases and for their assistance and co-operation in their care. This return has a very considerable money value, when we remember that for such examinations the usual fee is $5, and as physicians can not, as a rule, make such examinations themselves, they must work without the assistance thus afforded, unless they appeal to the regularly constituted laboratories.

What now are the possibilities of preventive medicine as concerns the larger centers of population? In answering this question we may first take as the basis of our reply the conditions found in some of the large cities with the lowest death rates, or still better, the conditions found in some healthy rural districts. In considering the crude death rates, as ordinarily reported, however, one must not ignore the influence of the sex and age distribution of the population on the death rate. As is well known, the death rates in the periods of life between 5 and 45 years of age are very low, and the death rate among women is lower than among men. If, then, in a city there is a relative excess of the population in the middle periods of life, or an unusual preponderance of women, we may have a crude death rate which seems very low, but which when corrected may be relatively high. For example, the death rate of New York City, as corrected by the English life tables, would probably be at least three points higher than it is. For 1894 the gross rate was 22.76, and the rate corrected by the English tables was 26.46. The corrected death rate of some of the large, rapidly growing Western cities would probably be five or six points higher than the crude death rate reported. The death rate of London at present averages about 17 per 1,000, and when corrected about 18.5 per 1,000, while the Berlin death rate is somewhat lower than this. The crude death rate of Surrey, a healthy rural district in England, is 14 and a fraction, and when corrected would probably be 15.

We can hardly use for a basis of comparison the conditions in any of the cities of this country with very low rates, because the rates have not been corrected, and the basis on which they are calculated can not always be accepted as correct. Taking all the facts together, and judging of the duration of human life as we know it, we may accept a corrected death rate of 14 or 15 in a large city as a goal toward which preventive medicine should strive and hope to achieve. If we consider the question

from another point of view, as to what is possible in the reduction of the death rate from distinctly preventable diseases, we would reach a conclusion not unlike the previous one.

In New York City it may be assumed that the present tubercular death rate of 2.7 may, under proper surveillance, with certainty be reduced to 1.2, and 1.5 points would thus be subtracted from the crude rate. The diphtheria death rate, already reduced 65 per cent. by the use of antitoxic serum, should certainly be reduced to one-third of what it is at present; it is now about .6 per 1,000 population. Similar reductions should be possible in the death rate from typhoid fever, measles and scarlet fever. The diarrheal diseases of infants have already been reduced in the last twelve years to one-half of their former prevalence, and should still be reduced more than 50 per cent. Thus more than 3 points may be subtracted from the crude rate in New York, which in 1903 was 18.18. The rate would then be 15+. The rate for 1903 was the lowest in the history of the city.

The most fatal affections with which we have now to deal in New York are the acute respiratory diseases, including influenza, lobar pneumonia, bronchopneumonia and acute bronchitis. The average death rate from this group of diseases now exceeds 3 per 1,000 of the population, and in years when there is an epidemic prevalence of these diseases the death rate may be 4 or more, as seems likely to be the case this year.

The advances in preventive medicine have as yet not only had no influence in reducing the death rate from this group of diseases, but, on the contrary, there has been a slow and continuous increase. I can not at this moment point out the method or the means by which a reduction is to be brought about, but still I firmly believe that with fuller knowledge such a reduction will become possible in the great cities where these diseases are so prevalent.

Something can be accomplished through the closer sanitary surveillance of the occupations and conditions under which the lower classes work, especially the noxious trades. Something, too, may be done through a closer supervision of foods to ensure their purity and freedom from adulteration.

A very difficult problem arises in connection with the diseases of the circulatory apparatus and the kidneys. My investigations have shown that in New York City a large increase has taken place, due to these causes, during the last twenty years. The acute respiratory diseases, cancer and diseases of the circulatory apparatus and the kidneys are the only important causes of death which have shown an increase during this period. The increase in cancer amounts to about 15 per cent., and the increase in the acute respiratory diseases amounts to about 15 per cent., while the increase in the diseases of the circulatory apparatus and kidneys combined equals about 40 per cent. In making this statement I have taken fully into consideration the possible influence of greater accuracy in the death returns, i. e., the inclusion formerly of these under other causes of death; but after making all allowances, it seems to me without question that an increase equaling 40 per cent. has taken place.

A very important sanitary problem is here presented to the health authorities. What are the factors in the lives of the inhabitants of our large cities (for I have found that similar increases, less extensive, however, have taken place in London, Paris and Berlin) which have caused such a remarkable increase in the prevalence of these affections, and how are these factors to be removed?

The time at our disposal does not permit of more than this elementary and cursory review of the work in preventive medicine. Sufficient facts have, however, been adduced to show how great have been its achievements, and some of the directions have been indicated in which its scope should be extended. With such extensions, and many others not mentioned, the future possibilities of preventive medicine seem to be even greater than the past achievements, for almost every development in bacteriology opens up a new field of work for the sanitary authorities.

Original Articles.

THE PROPHYLAXIS OF TETANUS.*

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Before taking up the consideration of the prophylaxis of tetanus, it may be well briefly to discuss the disease and to give some statistics regarding its prevalence and mortality.

ETIOLOGY.

Tetanus is defined as an acute, specific infective disease, characterized by involuntary tonic muscular spasms, tending to become generalized and with paroxysmal exacerbations from time to time. The causative micro-organism is the tetanus bacillus which, having gained entrance to the body, elaborates a virulent toxin and this, acting on the motor cells of the spinal cord and medulla, increases their irritability and induces the spasm.[1]

The tetanus bacilli or their spores are most commonly present in garden soil, street sweepings, stable manure and the feces of herbivorous animals.

In almost all cases the virus can be shown to have entered the body through a wound, and deep punctured wounds are the most likely to be followed by tetanus. The disease is more frequent in negroes than in white persons, and is more prevalent in the tropics than in the temperate zone.

PREVALENCE.

The distribution of tetanus in the various states, as shown by the United States census for 1900, is interesting. During that year 1,664 deaths were recorded; 185 of these were in Louisiana; 147 each in New York and Pennsylvania; 125 in Texas; 90 in Illinois; 76 in Ohio; 74 in Florida; 61 in Alabama; 56 each in Indiana and New Jersey; 51 in Virginia; 48 in Maryland; 46 in Georgia; 43 in Missouri, and 41 in Tennessee. Louisiana, with a census population of 1,381,625, heads the list with 185 deaths.

The prevalence of the disease by months has been investigated by Dr. H. Gideon Wells,[2] Chicago, who has found that the curve of deaths takes its upward start in May, reaching its maximum in July, and thence declining to October. These figures are for 1900. In 1901 there were relatively few deaths from tetanus in July, when the usual augmentation occurs. In 1902 the curve again reached its summit in July, but with a mortality of only 15 as compared with 26 in 1900.

* Read before the Mississippi Valley Medical Association at its meeting in Memphis, Oct. 9, 1903.

1. Encyclopedia Medica, vol. xii: "Tetanus," by W. T. Ritchie, M.D., Edinborough.
2. Fourth of July Tetanus, American Medicine, June 13, 1903.

The deaths from tetanus in Greater New York reached a maximum of 21 in July, 1899, the greatest totals in any other month of the year being 5 in June and 4 in September, the total deaths for the year being 38. In 1900, 13 deaths occurred during July and 5 in June out of a total of 33 for the year. In 1901 there were only 5 deaths in July, and this number was exceeded in April and October, in each of which months 6 deaths occurred.

The statistics of the census of 1900 show that 222 deaths from traumatic tetanus occurred between the ages of 10 and 14; 149 between the ages of 5 and 9; 117 between the ages of 5 and 19; 84 between the ages of 20 and 24; 79 between the ages of 25 and 29, and 77 between the ages of 30 and 34. As far as these statistics go, it appears that the greatest mortality from this disease occurs before the age of 19, and that the mortality below the age of 14 is about three times as great as that between the ages of 15 and 19.

THE JOURNAL of the American Medical Association has taken up exhaustively in its August 9 (1903) issue a subject which must interest the American physician deeply—namely, the tetanus following the Fourth of July celebration. Its statistics show an appalling and unnecessary slaughter of the innocents. The total number of deaths due to Fourth of July injuries is 466, of which 406 were due to tetanus. Pennsylvania heads the list with 86, and is followed by Ohio with 77, Illinois with 59, New York with 41, Michigan with 31, Missouri with 29, Massachusetts with 17, Minnesota with 15, Iowa with 16, Indiana with 14, Kansas with 13, and New Jersey and Wisconsin with 10 each. With but few exceptions, the victims were small boys.

The cause of Fourth of July tetanus has been supposed to be the presence of tetanus bacilli in blank cartridges, but this can not be considered as proved, as only one of the several investigators detected tetanus bacilli in blank cartridges or wads. The bacillus has, however, repeatedly been found in the dust of the streets where tetanus has been prevalent.

As a result of the investigations, we may conclude that there is no convincing evidence that blank cartridges contain tetanus bacilli, except as a rare contamination; there is, on the other hand, ample evidence that tetanus bacilli are present in street dust and on the persons and clothing of the injured, and the most reasonable conclusion is that of La Garde, Wells and other investigators, that the organisms are carried into the wounds from the surface at the time of the accident.

PROPHYLAXIS.

As the greatest mortality during the year is observed about the time of the national celebration on the Fourth of July, it naturally follows that in the prophylaxis of tetanus this important factor should not be omitted.

The prophylaxis of tetanus may be considered under five heads:

1. The enforcement of existing laws regarding the sale of toy pistols and other dangerous toys. In most cities and in some states there are already laws, supposedly in effect, which prohibit the use of firearms and the setting off of fireworks. At and around the time of the Fourth of July, however, these laws are almost invariably forgotten, or at least their enforcement is criminally neglected. A striking example of the results of enforcement of ordinances regarding the use of explosives is furnished in Washington, and this city does not show an increased mortality from tetanus in July.

2. The enactment of laws by Congress, state legislatures and municipalities prohibiting the manufacture and sale of toy pistols, blank cartridges, dynamite canes and caps, cannon crackers, etc. Spurred on by the terrible aggregate of deaths which followed the Fourth of July this year, several medical societies have already recommended the adoption of ordinances which shall avert the possibility of a repetition of this heavy total in after years. Several city councils have also drafted and adopted ordinances on these lines, but without enforcement such ordinances are of no effect, and the slaughter will be continued.

3. The open treatment of all wounds, however insignificant, in which from the nature or surroundings there is any risk of tetanus. By open treatment is meant the free opening of the wound, cleansing from all foreign substances, swabbing thoroughly with 95 per cent. carbolic acid, followed by open dressing of the wound, with the institution of drainage. During the preparation of the grounds and buildings for the World's Fair in Chicago, at which time the conditions for the development of tetanus were exceedingly favorable, by reason of the excavation, turning over of black soil, etc., more than 1,500 cases of punctured, incised and contused wounds were treated by the surgical staff on the grounds; in most instances the patients returned to work in two or three days, and in no case did tetanus develop.

4. The immediate use of tetanus antitoxin in all cases of Fourth of July wounds, wounds received in barn-yards, gardens or other places where the tetanus bacillus is likely to be present or tetanus infection to occur. The neutralization of any toxin still in the blood and not yet fixed in the nerve-cells can be effected by the injection of from five to ten cubic centimeters of tetanus antitoxin. This injection should be made as early as possible, and while its use may seem superfluous in cases in which wounds have been treated immediately and thoroughly, still it does no harm and gives additional assurance to the patient.

5. The injection of tetanus antitoxin as soon as tetanic symptoms become manifest. When the infection has so progressed that tetanus symptoms appear, the use of antitoxin is a forlorn hope, for, as Wells says, "a patient who has just developed symptoms of tetanus is not just developing the disease, but is dying of it." Although the results from the injection of tetanus antitoxin after the development of tetanus show thus far that only an exceedingly small percentage of recoveries take place, still, when the almost certainly fatal outcome of the acute form of the disease is considered, the use of tetanus antitoxin is made justifiable.

In the presentation of this subject I am aware that I am not submitting anything original; but I desire earnestly to urge on the members of this association the advisability, or even the necessity, of carrying on the propaganda begun by THE JOURNAL of the American Medical Association and continued by the medical and lay press. Heretofore there has been much excitement regarding the matter of Fourth of July injuries for a month or two following the celebration, but then, with the lapse of time, the appreciation of the needlessness of this mortality lessens, and until public attention is directed to the next series of deaths little thought is taken by the majority of the people. Physicians should take on themselves the burden of keeping the public aroused to the appalling mortality which succeeds a supposedly peaceful celebration, a mortality which with proper and thorough treatment, and with the enactment of sufficient laws, might be practically abolished. If the pro-

fession of the country would take united action in this matter, the mortality of 406 from tetanus following Fourth of July accidents alone might, in 1904, be reduced to zero. When it is remembered that by far the greatest number of deaths occurs in individuals who have not yet reached the age when they are able to distinguish between things dangerous and things safe, the responsibility of the physician as regards instruction of parents of the dangers to be feared, and in the precautions to be observed and the treatment to be carried through, is immeasureably increased. The saving of 400 lives from a burning or sinking ship would be considered well worth the doing. How much more important is the saving of hundreds of lives of the innocents from an unnecessary and horrible death!

PROSTATECTOMY.

REPORT OF 51 CASES OPERATED ON FROM MAY 6, 1901, TO FEBRUARY 26, 1904.

JOHN B. MURPHY, A.M., M.D.
CHICAGO.

(*Continued from page 1413.*)

TECHNIC OF PERINEAL OPERATION.

The incision is made in the median line of the perineum to within three-quarters of an inch of the anal orifice. The latter limbs of the incision now diverge from each other in an oblique direction on each side of the anus to the margin of the ramus and backward to the level of the posterior anal corrugations. The scalpel is used to divide the superficial perineal fascia, and the handle is then used to separate the muscle fibers in each lateral incision down to the deep perineal fascia and capsule of the prostate. This leaves the median raphe and the tissues for one-half inch on each side of it intact. By following this plan and always separating the muscular fibers in a backward and outward direction, the rectum is safe from injury.

After the completion of the lateral incisions the index finger of the left hand is inserted into the rectum and, with the scalpel, the central bridge of tissue mentioned above is divided close to the wall of the rectum down to the capsule of the prostate. The object in keeping close to the rectal wall in this last step of the operation is to avoid the hemorrhage which would occur if the corpus spongiosum were cut. In the tissues thus divided there are few vessels and practically no blood is lost.

The rectum is now pushed a little farther posteriorly, and the deep perineal fascia and capsule of the prostate are divided transversely with the blade of the scalpel. In my early operations I made the capsular divisions on each side of the median line and parallel with the raphe, but as the raphe must be eventually divided I now make one transverse incision across the entire capsule dividing the central septum. The handle is again used to free the capsule from the prostate on both sides sufficiently to allow the insertion of the index finger which liberates the capsule from the lateral lobes and posterior isthmus back to the bladder wall. A short, broad Sims' speculum is then inserted and used to displace the rectum and capsule backward. One four-pronged cat's paw hook retractor is now put in each lateral lobe as far back toward the bladder as possible, and used to draw down the prostate *en masse*. A long curved scissors now divides transversely the posterior urethral wall anterior to the prostate. The division is then continued on each side through the lateral attachment of the anterior isthmus to the posterior boundary of the prostate. This boundary can be readily recognized as the urethra is open. The prostate is now free from all of its connections anteriorly and laterally, and is removed entire when the posterior urethral wall behind the prostate is divided transversely.

It will be seen from the above description that all of the posterior prostatic urethra to the sphincter vesicæ internus is removed with the prostate.

This particular method of separating the prostate from its attachment to the bladder makes the procedure practically a surface operation from beginning to end.

After the last step described above is completed, the sound is withdrawn and the finger passed into the bladder to examine its interior and to determine whether or not stones are present or to detect enlargements of the middle lobe or pedunculated growths from the lateral lobes. If the latter are found they can be readily removed without lacerating the sphincter.

The lateral edges of the prostatic urethra are now brought together to form a new canal, by means of a continuous catgut suture, which is inserted from behind forward. Only space enough is left for the drainage tube which passes into the bladder. A loose packing of bismuth subiodid gauze is now put in the cavity of the

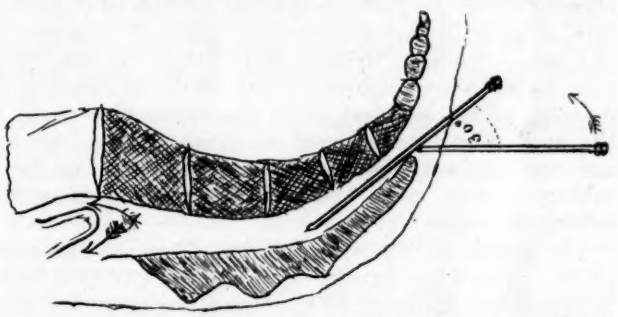

Fig. 10.—Showing needle inserted through hiatus sacralis into sacral canal for the purpose of producing analgesia by epidural injections of cocain solution.

capsule, the end of the gauze with the tube protruding through the left angle of the incision. The divided perineal muscles are sutured back into position with catgut and the skin approximated with silkworm gut.

The tube is removed from the bladder four to ten days after the operation, depending on the degree of cystitis present. The gauze is removed on the third day after the operation and the wound allowed to close.

SUPRAPUBIC PROSTATECTOMY.

In this operation we have followed the plan of Freyer, that is, of splitting the bladder mucosa over the lateral lobes, inserting the finger beneath the mucosa and enucleating the prostate—bringing with it the prostatic urethra. While it can be accomplished and is indicated in cases where the prostate is high up and firmly fixed, it is not at all so clean-cut and precise a procedure as is the perineal operation described above. It has the disadvantage of requiring irrigation in order to keep the bladder aseptic. It has the advantage, however, of assurance against perineal fistula, but the perineal fistulæ leak only during urination, while the ventral fistula following the suprapubic operation leaks more or less continuously, and from our experience, the healing is no more rapid.

The surprising feature of the suprapubic operation after this method is that stricture is not more common, and it does seem as though incontinence should occa-

sionally result—two problems which time alone will elucidate.

In the perineal operation, the wall of the bladder should not be divided or torn. When an intravesical lobe exists, the mucous membrane covering it should be split and the lobe enucleated from within the bladder, thus preserving the vesical muscles. The posterior wall of the prostatic urethra should be removed. The urethra should never be opened primarily, and the prostate should never be shelled away from the bladder from before backward, but always from behind forward, dividing the isthmus as the prostate rolls away from the bladder. To favor this I have used the ordinary deep lateral retractors, a Sims' speculum as a posterior retractor and the hooks as shown in Figure 9. The hooks are utilized (1) to draw the prostate into the field and retain it there; (2) to evert the prostate while it is being detached from above downward from the bladder wall. I find great advantage in using the handle of the scalpel down to the prostate on each side before dividing the septum. It insures safety to the rectum. The sound is the only instrument needed to press the prostate down into the field, and it also answers as a guide to the location of the urethra.

It is entirely unnecessary in the operation of prostatectomy to remove the whole anatomic structure, as is claimed by Freyer, as the anterior portion of the prostate, or isthmus, never shows any material enlargement and never produces urinary obstruction. It can, however, be as easily removed, if the entire enucleation be desired, by the perineal as by the suprapubic route if the hook retractors are used as shown in the drawing, and the whole prostatic urethra sacrificed. The hemorrhage is very much less by the perineal than by the suprapubic route.

The arched or Y-shaped incision offers the best view of the underlying structures, and the claim that there is excessive mutilation of the tissues by these incisions is not sustained by the facts. No matter how large the skin incision, the opening within can not be less than the size of the prostate; therefore, why endeavor to bring a large prostate out through a buttonhole in the skin? Why do surgery in the dark when open work can be as easily and safely performed?

REMARKS.

The results are more gratifying as time progresses and we become more familiar with the technic in the complicated and difficult cases, but my first case has not been excelled by any subsequent one in its result.

The capsule of the prostate should be displaced backward with the rectum to insure the integrity of the latter.

The hemorrhage was quite profuse in two cases. This was controlled by placing hemostatic forceps on the bleeding points, and allowing them to remain for forty-eight hours, as in vaginal hysterectomy. The packing with subiodid of bismuth gauze is sufficient to control venous hemorrhage.

The permanent catheter has been abandoned in my later cases. It is not only unnecessary, but injurious. The perineal drain is retained until the urine is practically free from pus, usually from three to eight days. The bladder is not usually irrigated.

It is important to remove the redundant prostatic urethra, to avoid the tendency to perineal fistula, and the opening should be closed with catgut sutures down to the drainage tube.

CONCLUSIONS.

1. The perineal route gives the best ultimate result.
2. It is accompanied by less danger than the suprapubic or Bottini operations, as regards (*a*) hemorrhage; (*b*) sepsis; (*c*) injury to the neighboring structures; (*d*) life. In fleshy patients the hemorrhage is more profuse, repair slower and the urethral fistula lasts for a longer time.
3. The drainage is excellent, and favors rapid restoration of the bladder to its normal condition.
4. The period of wound repair is much shorter than by the suprapubic route. All cases had primary union down the drainage tube.
5. The vesical control is almost uniformly good.
6. The sexual power is usually destroyed.
7. The relief of vesical irritation is great, and the frequency of urination is reduced to about normal.

In submitting this paper the chief purpose is to show the final results from the patient's standpoint. It is a settled fact from the force of numbers—in the hands of many operators—that the mortality from the operation of perineal prostatectomy *per se*, is practically *nil*. The remaining questions are: 1. Does the operation relieve the patient from his suffering? 2. Has he assurance that he will not have to return to the catheter? 3. Has he urinary control? 4. Is he free from the danger of stricture of the urethra? 5. Is he comparatively free from the dangers of secondary renal changes? 6. Is there danger of a prolonged or permanent urethral fistula? 7. Will he suffer from repeated and annoying attacks of epididymitis?

In order to obtain exact and definite information on these points the following list of questions was sent to each patient by Dr. James M. Neff, and the answers, so far as they have been received and indicate trouble, are inserted in the individual history, so that the reader is able to draw his own conclusions as to the results of the operation.

1. Is wound below entirely healed?.....If not, when did it open and what is the character of the discharge from it, urine or pus?.....If urine is discharged from wound does it come constantly or only when the bladder is emptied?.....

2. Do you have any pain in wound, bladder or urethra?..... If so, where and how severe is it?.....

3. How long can you hold the urine during the day?.....

4. How long can you hold the urine during the night?.....

5. Have you perfect control over the urine? ..... If not, to what extent have you control?.. .....

6. Have you used the catheter since operation?..... If so, how often, etc.?.....

7. Is the sexual function impaired?..... If so, to what extent?.....

8. How is your general health as regards weight, ability to attend to business, etc.?.....

9. Please state anything else of interest not mentioned above.....

CASE 1.—Mr. E. W., aged 55; occupation, financier. Admitted to Mercy Hospital May 16, 1901.

Personal History.—Had specific urethritis; stricture followed; cured.

Present Illness.—Three years ago he began to suffer from increased frequency of micturition, which has continued ever since. Has used catheter and vesical lavage for 2 years. Residual urine, 3 ounces. He has been entirely incapacitated for work.

Examination.—Urine shows a trace of albumin, some blood and a large amount of pus. Urea 1.8 per cent.; specific gravity 1024. Prostate much enlarged; left lobe the larger. Patient emaciated and very neurotic.

Operation.—May 18, 1901: Regular technic used. Rubber catheter inserted through penis. Uneventful recovery; left hospital June 26, 1901. Feb. 25, 1903, perineal wound has remained closed. Perfect control of bladder. Holds urine five or six hours during day and is not obliged to get up to urinate during the night. No pain in the wound, bladder or urethra. Urine free from pus. Sexual function impaired. General health excellent.

CASE 2.—Mr. J. S., aged 54; merchant; married. Admitted to Mercy Hospital July 3, 1901.

Present Illness.—For past seven years patient has been troubled with painful urination and inability to empty bladder. Two years ago he began catheter life, continuing it for thirteen months. Resorted to catheter again this spring and has used it since.

Examination—Prostate is very much enlarged and almost fills the pelvis. Urine shows trace of albumin and pus in quantity. Residual urine, 3½ ounces.

Operation.—July 13: Regular technic. Catheter inserted through the penis into bladder. Patient discharged from hospital August 22, with full control and practically no pain during urination.

March 30, 1903: Wound has remained healed. Has complete control over bladder. Can retain urine as long as he desires, never having to get up at night. No pain in the wound, but has slight feeling of contraction at the close of the act of micturition. No blood or pus in the urine and but a small amount of mucus. Sexual function absent.

Report March 29, 1904: Patient states that result of operation is perfect. General health excellent. Sexual function absent.

CASE 3.—Mr. A. J., aged 67; merchant. Admitted to Mercy Hospital Aug. 24, 1901.

Present Illness.—Has suffered for two years with frequent desire to urinate and vesical tenesmus. Has used catheter at intervals for past nine months.

Examination—The prostate is very much enlarged. Stone detected. Urinalysis: Acid; specific gravity 1013; a small amount of albumin; urea, 1.4 per cent. Microscopic: Epithelium, a few cells; many red blood cells; pus in quantity. Residual urine, 10 drams.

Operation.—August 25: Regular technic. Stone removed without difficulty. Rubber catheter introduced through urethra into bladder.

Patient discharged from hospital with wound closed, but only slight urinary control, June 26, 1902.

February, 1903, perineal wound has remained closed. He has not complete control of the urine and there is leakage when he moves about and during sleep. He complains of considerable pain in the bladder and rectum. Urine contains pus. Sexual function is entirely abolished This patient has since died of pneumonia. (In latter part of 1903.)

CASE 4.—Mr. W. S. M., aged 58; married; farmer. Admitted to Mercy Hospital Nov. 4, 1901.

Present Illness.—Patient fell astride a ridge of dirt eight years ago. Had chills and fever for next twenty-four hours and passed his urine with effort. No blood in the urine or stools. Since that time has had frequent urination and vesical tenesmus especially when on his feet. Was catheterized but once last summer.

Examination.—Prostate enlarged to second degree. Stone detected.

Operation.—Nov. 6, 1901: Regular technic.

Report March 29, 1904: Wound has remained healed. Has occasional pain in vicinity of wound, not severe. Holds urine during day from two to three hours and gets up three or four times at night. Control of bladder good. Has not used catheter since operation. Sexual function impaired. Some pus present in the urine. Has had several small abscesses form in front of anus, but urine has never been discharged from them when they opened.

CASE 5.—Mr. P. T., aged 62; retired farmer. Admitted to Mercy Hospital Dec. 2, 1901.

Present Illness.—Since four years ago has complained of frequent urinations, of late eight or ten times during night. Has used catheter several times in past 10 weeks. Severe cystitis for some time past.

Urinalysis.—Sp. gravity 1016; urine turbid; urea 2.4 per cent; phosphates increased; indican present; no casts, some albumin; many pus cells. Bladder was irrigated daily after admission. The prostate much enlarged and lobes seem to fill the pelvis. A stone detected in bladder.

Operation—December 11: Regular technic. Patient left hospital January 18.

Report March 29, 1904: A small sinus remains at site of perineal wound. A little pus is discharged from sinus, but no urine at any time. Complains of some pain in vicinity of this sinus when he sits down. Holds urine during the day about two and a half hours and at night arises about four times to evacuate bladder. Urinary control good, except at night, when there is some leakage through urethra. Used catheter a few times previous to January, 1904, but not since. Sexual function not impaired. General health excellent, better than for years.

CASE 6.—Mr. L. D. R., widower, aged 70.

Present Illness.—In September, 1901, had an abscess in prostate which discharged into rectum. Nov. 11, 1901, present attack began, with severe pains in prostate and constant desire to pass water. On November 14 complete retention came on and continued until the 22d. He was catheterized every three or four hours.

Operation.—Nov. 28, 1901: At Sandwich, Ill. Regular technic. Abscess was found in the left lobe.

March 29, 1904: A small perineal fistula persists, through which a small amount of urine is discharged during micturition. Has some pain during passage of urine. Holds urine during day about 2 hours and at night from 1 to 2 hours. Control good. Sexual function impaired. General health good.

CASE 7.—Mr. C. G., aged 52; laborer; single. Admitted to Cook County Hospital Dec. 7, 1901.

Present Illness.—Patient is mentally deranged and his statements are not to be relied on.

Examination.—Bladder extends upward above umbilicus. No stricture. Slight urethral discharge. A very much enlarged prostate found.

Operation.—Dec. 20, 1901: Regular technic. The mental condition of the patient remained the same after operation. The perineal wound entirely healed and he had some urinary control. About six weeks after the operation he developed an acute lobar pneumonia and died before he left the hospital.

CASE 8.—Mr. H. H,, woodworker; aged 66. Admitted to Mercy Hospital Dec. 16, 1901.

Present Illness.—Has had symptoms of prostatic hypertrophy for 12 years. Has catheterized himself daily since three weeks ago. Residual urine, 5 ounces. He urinates every two or three hours during the day and rises many times at night.

Urinary Examination.—1,500 c.c. in 24 hours; sp. gravity, 1017; urea, 1.5 per cent.; turbid; faint trace of albumin; pus in large quantity.

Examination.—Prostate very much enlarged, particularly on left side. Stone found.

Operation.—January 8: Regular technic. Stone removed. Soft catheter retained in bladder.

Report March 29, 1904: Wound has remained permanently healed. No pain at any time. Holds urine during day for six or seven hours and occasionally gets up once during night. Some times sleeps all night. Urinary control perfect. Has not used catheter since operation. Sexual function lost. General health excellent.

CASE 9.—Mr. C. D., aged 67 years. Admitted to Cook County Hospital Jan. 28, 1902.

Present Illness.—About five years ago first experienced difficulty in passing urine. The straining and frequent desire to urinate have persisted to the present time. Urinates about every three hours during the day and night. He commenced using catheter last September and since then has continued its daily use. Right testicle has been swollen for past few days.

Examination.—Prostate only slightly enlarged. Urinalysis:

acid, turbid, trace of albumin; no sugar; pus cells numerous. Residual urine in bladder, four ounces.

Operation.—Feb. 7, 1902: Regular technic. A fold of mucous membrane, forming a sort of valve to the internal urethral opening, was cauterized in the median line. Permanent catheter inserted.

April 16, 1902: He states that the results of the operation have been perfect in every way. At that time he was in the hospital with a fracture of the femur. It has been impossible to locate this patient since date of last report.

CASE 10.—Mr. G., aged 69 years; occupation, farmer. Admitted to Mercy Hospital Feb. 13, 1902.

Family and previous history negative.

Present Illness.—Began 18 months ago with difficulty in starting the urine. Shortly after onset developed an acute retention of urine and had to be catheterized. Has used catheter continuously since August last.

Examination.—Poorly nourished. Prostate only slightly enlarged as regards lateral lobes. The sound in the urethra shows the prostatic portion of the canal pushed far forward, evidently by a large middle lobe. No stone found. Urinalysis: acid, 1011; cloudy; trace of albumin; many pus cells; few red blood cells.

Operation.—Feb. 15, 1902: Suprapubic cystotomy with deep cauterization, by means of the Paquelin cautery, of the middle lobe, where it projected into the bladder. Convalescence uneventful, except that the suprapubic sinus was slow in closing. Patient left the hospital with symptoms relieved and wound healed April 30, 1902.

CASE 11.—Mr. E. G., aged 65 years; farmer. Admitted to Mercy Hospital Feb. 26, 1902.

Present Illness.—About ten years ago patient first experienced difficulty in passing his urine. Two years ago he began using catheter and has continued its use daily ever since. About fourteen months ago a suprapubic cystotomy was performed and the incision was slow in healing. He received no benefit from the operation. Of late he has had to urinate every hour.

Examination of patient showed suprapubic wound entirely healed. Prostate much enlarged bilaterally. Urinary examination: alkaline; sp. gravity, 1016; albumin present; many pus cells; no casts.

Operation.—March 1, 1902: Regular technic. Discharged from hospital April 17.

March, 1903: Perineal wound has remained healed. He has complete control of the bladder and holds the urine for one and a half to two hours during the day and night. Of late he has occasionally used the catheter at night. Complains of some pain in the wound and urethra. Urine contains some pus, but less than before operation. Sexual function abolished. Patient still complains of frequent desire to urinate and inability to empty bladder. He has no stricture, as a large sound falls into bladder.

CASE 12.—Mr. X., aged 78 years, was seen by me in consultation with Dr. Charles D. Lockwood, in Pasadena, Cal., March, 1902. Patient had suffered with the usual retention of prostatic disease for the past four years, most of the time resorting to the catheter for relief. He had several ounces of residual urine. Urine contained some pus; no blood.

Examination revealed a prostate filling the transverse diameter of the pelvic arch.

Dr. Lockwood operated and I assisted.

On March 23, 1903, I saw this patient with Dr. Lockwood. He was looking splendid and said he "did not know he had a bladder." He does not have to get up at night to urinate and goes as long as six hours in the daytime without urinating.

CASE 13.—Dr. F., aged 60 years; physician. Admitted to Mercy Hospital May 10, 1902.

Present Illness—Began with acute retention three and one-half years ago. Since then frequent urinations have continued. Has used catheter once or twice a day for past year.

Examination.—Prostate enlarged, right lobe being much larger than left. Urinary examination: Quantity in 24 hours 2,410 c.c.; acid, sp. gravity 1010; trace of albumin. Microscopic: Many pus cells; no casts.

Operation.—May 14, 1902: Regular technic. Permanent catheter inserted through urethra. Left hospital July 4, 1902.

April 1, 1903: Perineal wound has remained closed and he has complete control of the urine. He holds urine five hours during the day and nine hours at night. No pain in wound, bladder or urethra. Sexual function is abolished.

CASE 14.—Mr. C. D. B., age 66; occupation, farmer. Admitted to Mercy Hospital May 8, 1902.

Present Illness.—For past 7 years patient has had to pass urine frequently, sometimes every hour during the day and seven or eight times at night. Catheter has been used only for past few days.

Examination.—Prostate enlarged, the lateral lobes extending out to rami on each side. Bladder distended to two inches above navel. Urinary examination: Albumin +; no sugar; few granular casts; many pus cells. For four days before operation bladder was catheterized every five hours and ten grains of urotropin given t. i. d.

Operation.—May 14, 1902: Regular technic. Permanent rubber catheter introduced. Patient left hospital June 19, 1902.

Report March 29, 1904: Wound has remained permanently closed. No pain at any time. Has perfect control of the urine and holds it the normal length of time. Has not used catheter since operation. Sexual function impaired. General health excellent.

CASE 15.—Mr. E. S., aged 69 years; farmer. Admitted to Mercy Hospital May 6, 1902.

Family and personal history negative.

Present Illness.—Four years ago had two attacks of renal colic in left side, and after second, passed several small calculi. For the past year has suffered from frequent urination, with considerable pain. Several attacks of acute retention during the last six weeks.

Examination.—Very slight enlargement of the lateral lobes of the prostate. Stone found in the bladder. Urinalysis: Yellow, clear, 1012, no albumin, no pus.

Operation.—May 28, 1902: Suprapubic cystotomy. Two stones removed and the middle lobe of the prostate enucleated. Mucous membrane sutured over the defect left by the removal of the lobe. Patient left hospital June 11, 1902, with the suprapubic opening not entirely healed.

CASE 16.—Mr. W. M. T., aged 60 years. Admitted to Mercy Hospital July 7, 1902.

Present Illness.—Onset twenty years ago with inability to pass urine and pain over the pubes when he attempted to urinate. He has catheterized himself steadily for past six years.

Examination.—The prostate gland only moderately enlarged. Urine: Acid, turbid, albumin trace, no sugar, many pus cells.

Operation.—July 9, 1902: Regular technic. Permanent catheter introduced. Left hospital August 6, 1902.

Report March 29, 1904: Wound has remained permanently closed. Some pain in urethra occasionally. Holds urine during day from one to one and a half hours and at night from one to four hours. Retains urine in bladder without leakage, but must use some force to start the stream. Sexual function impaired.

CASE 17.—Brother A., aged 52 years. Occupation, teacher. Admitted to Mercy Hospital July 18, 1902.

Present Illness.—Patient has had enlargement of the prostate for the past twelve years, the principal symptom of which is increased frequency of urination, both day and night. He has to void his urine every one-half to two hours during the day and every two hours at night. No pain. Never had a catheter passed.

Examination of Patient.—Prostate moderately enlarged and very hard. Examination of urine: Quantity in twenty-four hours, 1620 c.c. Specific gravity, 1015. No albumin; no sugar. Microscopic examination:: Negative. No pus or blood.

Operation.—July 23, 1902: Regular technic. Permanent catheter used. Left hospital Aug. 18, 1902.

March 20, 1903: Perineal wound has remained healed and he has complete control of the urine. He holds urine four hours during the day and four or five hours during the night. No pain. Urine clear. General health excellent.

CASE 18.—Mr. W. P. D., aged 68 years. Married. Occupation, traveling man. Admitted to Mercy Hospital Aug. 12, 1902.

Present Illness.—Began about a year ago, with inability to pass his urine; had to be catheterized. Since that time he has suffered from increased frequency of urination.

Examination.—Prostate enlarged, the enlargement affecting both lobes.

Operation.—Aug. 13, 1902: Regular technic. Patient was discharged from hospital Sept. 23, 1902.

March 30, 1903: Perineal wound has remained healed and he has complete control of the urine. He holds urine from five to seven hours during the day and about six hours at night. Sexual function is abolished.

Report March 29, 1904: Wound has remained permanently healed. No pain. Holds urine during the day from one to two hours and at night from one to three hours. Control of bladder good, except when it becomes distended. Patient's doctor has passed catheter a number of times. Sexual function impaired. General health good.

CASE 19.—Mr. E. J. W., aged 60 years. Single. Photographer. Admitted to Cook County Hospital Aug. 24, 1902.

Present Illness.—For 36 hours before entering hospital patient suffered from very frequent urinations and severe vesical tenesmus. The night before he came in he had to get up fifteen times to pass his urine. At time of admission he was unable to urinate and had to be catheterized.

Previous History.—Had gonorrhea twenty years ago, followed by gleet. Last winter was troubled with frequent urinations. He had one attack of retention one year ago.

Examination.—Bladder enormously distended. Prostate greatly enlarged. Examination of urine: amber, normal odor, acid reaction; sp. gravity, 1020; no albumin, no sugar; few red blood corpuscles.

Operation.—Aug. 26, 1902: Regular technic. Permanent catheter inserted. Left hospital Nov. 7, 1902, with perineal wound closed. Urinated a large amount every two hours without pain. Control was good, though after micturition there was some dribbling for a few minutes. Patient has not been heard from since.

CASE 20.—Mr. J. B., aged 60 years. Occupation, watchman. Entered Cook County Hospital Sept. 20, 1902.

Present Illness.—Since September, 1901, patient has suffered from frequent urination. Has been catheterized twice daily since entering the hospital.

Examination.—Bladder distended above symphysis. Prostate markedly enlarged. Urinary examination: yellow, pale, 1013; albumin present; no sugar; moderate number of hyaline and granular casts; few pus cells.

Operation.—Sept. 26, 1902: Regular technic. Patient discharged from hospital Jan. 13, 1903, with perineal wound closed. April 2, 1903: Wound has opened periodically since he left the hospital, discharging a little urine for a few days and then closing. No discharge from perineum for past week. Excellent control of urine and holds it from two to four hours during day and from two to three hours at night. No pain. Sexual function abolished. Impossible to trace patient since last report.

CASE 21.—Mr. F. D., aged 68 years. Occupation, farmer. Admitted to Mercy Hospital Sept. 26, 1902. Family history negative. Personal history: No serious illnesses.

Present Illness.—Began fifteen years ago with frequent urination. For the last five years he has used catheter daily; of late seven or eight times during the day and six at night.

Examination.—Moderate prostatic enlargement. The distended bladder can be palpated bimanually. A Thompson searcher was passed into the bladder and a large stone found. Examination of urine: yellow, turbid, fetid odor; alkalin reaction; large amount albumin. Microscopic examination shows large number of bacteria present, also pus cells.

Operation.—Sept. 29, 1902: Regular technic. Stone removed. Permanent catheter inserted. Patient was discharged from hospital Oct. 24, 1902, with perineal wound entirely closed and urinary control good.

February, 1903: Wound is entirely healed and he has complete control of the urine. He holds urine three or four hours during the day and six or seven hours during the night. Has no pain. Sexual function is abolished.

Report March 29, 1904: Since last report a calculus has reformed in the bladder and he is suffering from symptoms caused by this at the present time. Wound has remained healed and urinary control is good, but the stone causes painful and frequent urination. Suprapubic cystotomy was performed, April 16, 1904, and an enormous phosphatic stone removed. Patient is now in the hospital and the wound has not quite healed.

CASE 22.—Mr. P. D., aged 49 years. Occupation, laborer. Admitted to Mercy Hospital Nov. 6, 1902.

Present Illness.—For past four years has noticed increasing difficulty in urination. He has frequent desire to empty bladder and suffers great pain from the tension. Voids urine three to five times during day and from five to seven times at night. Has never used catheter.

Examination.—Prostate considerably enlarged. No stone found. Urinary examination: sp. gravity, 1030; yellow; no albumin; no sugar; no pus or blood.

Operation.—Nov. 10, 1902: Regular technic. Patient discharged from hospital Dec. 10, with perineal wound practically healed and with good control of urine.

Report March 29, 1904: Wound has remained permanently closed. Has only slight occasional pains in bladder just before passing urine. During the day urinates four times and usually does not have to get up at all during the night. Control of urine is perfect. Has not used catheter since operation. Sexual function not impaired. General health excellent.

CASE 23.—Mr. J. W., aged 71 years. Admitted to Mercy Hospital Jan. 4, 1903.

Present Illness.—For past eighteen years patient has suffered from frequent urination, especially at night. Has had to get up three or four times to evacuate the bladder during the night. For the past three months the difficulty in passing his urine has increased. Three months ago had to be catheterized twice daily for eight days.

Examination.—Arteries sclerotic. Prostate considerably enlarged. Examination of urine: 1680 c.c. in twenty-four hours; yellow; turbid; albumin present; no casts; large amount of pus.

Operation.—Jan. 7, 1903: Regular technic. Patient did well after the operation and was out of bed in wheel chair January 16. January 17 he developed symptoms of cerebral embolism, which continued until January 25, when he died.

CASE 24.—Mr. A. B., aged 63 years. Occupation, farmer. Admitted to Mercy Hospital Jan. 10, 1903.

Present Illness.—Began three years ago with increased frequency of urination, every two to three hours. Since eighteen months ago he has catheterized himself every three hours.

Examination.—Prostate considerably enlarged. Urinalysis: yellow, acid, trace of albumin, no sugar, pus cells abundant, no casts.

Operation.—Jan. 12, 1903: Regular technic. Patient discharged from hospital Feb. 11, 1903, with perineal wound closed and good control of bladder.

Report March 29, 1904: Wound has remained permanently closed. No pain, but some slight tenderness in perineum. Holds urine during the day two hours or longer and at night from one and a half to two hours. Control of urine excellent. Has not used catheter since operation. Sexual function lost. General health excellent.

(To be continued.)

NOTE.—The continuation of the paper of Drs. Jackson, Porter and Quinby, begun in last issue, is unavoidably postponed.

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THE PRESIDENT'S ADDRESS, AND THE ANNUAL ORATIONS.

The addresses published in this issue call for special notice for many reasons. The President's address is a review of the Association's problems and its work. He finds much reason for congratulation; the progress that has been made in organization has been most striking and the prospects for future enlargement and for the unification of the profession are most bright. The Section work of the Association is one of the most important objects of the annual session, and his suggestions regarding it are worthy of consideration. The suggestion that the sections organize special international congresses when the time is ripe will, we trust, be a fruitful one. Dr. Musser's remarks on sanitary science and its advance, and the position of the profession toward the public in this particular, are timely, and we hope will receive the attention they merit. But that portion of the address bearing on medical education especially calls for notice here. The history of the Association has been wrapped up in this subject to a greater or less extent, but it is only of late years that we are appreciating the fact that in our zeal for higher education we have been multiplying the facilities beyond the demand, and encouraging many who are not fitted for practice to take the easiest route into the ranks. The value of a general liberal education to the physician is also a point which is very properly emphasized in the address, and the tendency of Dr. Musser's thought is toward the final requirement of a still higher standard of general education as a preliminary to entrance into medical professional studies. He thinks that there should be one educational requirement, the equivalent of that for which a first-class college degree stands, and the necessity of the hospital year as the finish of the culture required by an individual who is to go forth as a physician, is one that can not be too strongly emphasized. At the present it may be an ideal which we can not altogether live up to, but if we hold it strongly as an ideal we will more constantly approach it, and the time will probably come, perhaps not so far ahead, when no man will be considered as fitted to go out into the world to care for the health and welfare of his fellows who has not had at least a year's practical, thorough training under the leaders of the profession in the hospitals of his country. The public also needs education in this regard; but we do not think that that will be a difficult problem. The fact that hospitals give to nurses the highest opportunities, and yet have not always given them to the embryo physician, who has to be above them, is altogether an irrational condition of affairs. There are other points in Dr. Musser's address that call for mention, but space forbids.

The Oration on Medicine by Dr. Dock takes up a subject that is rarely treated of on such occasions, and, therefore, has the merit of novelty in addition to its own intrinsic merits. It raises some interesting ethical questions. The matter of prognosis is a practical one to the practicing physician, and no one knows at what time he may be called on to exercise his best judgment in this direction. Dr. Dock treats the subject most interestingly and the address is full of thought. Personally, we do not believe that actual falsehood is ever required. While there is life there is hope, even though that hope may be infinitesimal, and we think that a guarded statement of the possibilities, given, however, with a hopeful and cheerful accompaniment, is always far better than a misstatement. The patient's welfare should always be before us, and it is no satisfaction to know that the patient passes away under a false impression raised by his physician. There is plenty of room for individualization in this matter, and, as we understand it, Dr. Dock takes a similar view to that expressed above.

There are probably few American surgeons who are better qualified to give the Oration on Surgery than Dr. Mayo. He takes up a comparatively limited subject—surgical diseases of the upper abdomen—but it is treated with the thoroughness that might be expected from his ample experience. The upper abdomen has been one of the recent conquests of surgery, and the progress that has been made is well shown in his address. Conditions which formerly were hopeless have been rid of nearly all their terrors owing to the advances of the past few years, and the prospect for still better work in the future is most hopeful.

The Oration on State Medicine by Dr. Biggs points out with justice what has been done in the line of preventive medicine, facts that have not been appreciated by the profession or the public. It is not alone in such obvious matters as vaccination and antitoxin that the advances are seen. The hosts of disease, as we are learning to appreciate, are coming more and more under human command. Dr. Biggs is an advocate of the extension of notification of disease to a large class of disorders that now escape, and his remarks on this point deserve attention. There is little doubt that, when we understand the dangers, public opinion will support notification, and that, even in such conditions as typhoid fever, pneumonia and tuberculosis, with due precautions by thoroughly intelligent health officers, it need not add to the inconvenience of the sufferers, but will greatly aid in the security of their fellows. There are still problems for sanitation to meet, as is shown by the increasing mortality from respiratory diseases of late years, yet the fact is that the gains that we have made make the future most promising.

SOURCES OF INFECTION IN TYPHOID FEVER.

The opinions recently expressed by Koch on the modes of infection in typhoid fever are being made the basis of action in several parts of the German Empire, and the various inquiries that have been set on foot at Koch's instigation seem likely to shed light on some of the obscurer problems relating to the dissemination of typhoid fever among both urban and rural communities.

One of the most recent studies of this character is by Dönitz,[1] and treats of an investigation into the origin of the 122 cases of typhoid fever that were reported in Berlin between Oct. 20, 1902, and June 30, 1903. Eighteen of this number were rejected on the ground of questionable or mistaken diagnosis, and 21 were excluded as being imported cases. Of the remaining 83, 37 could be ascribed to definite causes, namely, 18 to contact infection, 6 to water infection (bathing), 3 to infection on the sewage farms, and 10 to milk. The remaining cases, for varying reasons, could not be traced with any reasonable degree of certainty. Dönitz, however, enumerates other possible sources of infection which may conceivably have been responsible for the causation of the untraced cases, such as the use of raw vegetables or of infected butter. He considers briefly the possibility of housefly infection, but does not attribute much importance to this mode of dissemination under present Berlin conditions; he also dwells on the possibility of rat transmission, which he seems to regard as a factor worthy of investigation. Some readers may deem it curious that the possibility of oyster infection, which has recently excited so much interest among English and American sanitarians, is not mentioned.

The underlying principle of the present campaign against typhoid fever in Germany, of which such painstaking researches as that by Dönitz form an important feature, seems to have been misunderstood in some quarters. The movement to eradicate typhoid fever by exercising a more rigorous control over the opportunities for contact infection, and the other modes of spread above mentioned, has been taken as indicating that drinking water infection is either less common than has been generally supposed, or is of distinctly subordinate importance. No assumption could be more wide of the mark. The truth is that in Germany drinking water infection has been reduced to a minimum by government supervision and regulation of public water supplies, and that such scattered cases of typhoid fever as now occur in the large cities are due to other causes. This condition, however, affords no ground for setting aside the evidence of the frequency and importance of water infection in those countries where the water supplies are less carefully guarded. No one at all cognizant of the character and mass of this evidence can entertain a doubt that the excessive prevalence of typhoid fever in the United States is directly attributable to contaminated water supplies. It is not necessary to shut our eyes to the greater danger in order to appreciate the existence of the lesser.

It will be generally admitted, however, that in our zeal to remedy the deplorable conditions surrounding many of our public water supplies in this country we have as yet paid insufficient attention to those less conspicuous modes of dissemination against which the German sanitariums are now beginning their campaign of extermination. In spite of the costly experience gained in the military camps during the Spanish-American war, the prevention of contact infection has not been given the serious consideration it deserves.

1. Festschrift z. sechzigsten Geburstage von R. Koch. 1903. p. 297.

DECAPSULATION OF THE KIDNEY FROM THE EXPERIMENTAL STANDPOINT.

Since decapsulation of the kidney was first proposed as a therapeutic procedure explanations as to the rationale of the results have not been lacking. Inasmuch as autopsies on these cases have so far been very infrequent, the writers of the earlier articles relied for their theories on analogy or pure supposition. Within the last six months a number of articles have appeared dealing with the subject from an experimental point of view. In this country, Harold Johnson,[1] and in Germany, Asakura and Stursberg,[2] have studied the effect of decapsulation on normal kidneys by the experimental method.

In a recent article Hall and Herxheimer[3] publish the results of their work on normal kidneys, and also on kidneys in which an acute nephritis had been experimentally produced. The results of decapsulation of normal kidneys were the same as those observed by Johnson; at the end of from ten days to three weeks a new capsule, in many cases thicker than the original one, had formed. Furthermore, neither Johnson nor Hall and Herxheimer were able to find any evidence of increased vascular connection between the new-formed capsule and the cortex of the kidney. In producing an experimental nephritis Hall and Herxheimer used ammonium chromate, which produced a degenerative nephritis with albumin and casts in the urine lasting from sixteen to eighteen days if the animal survived. The decapsulation was sometimes unilateral and sometimes bilateral, and was usually performed on the third day. A naked eye examination of these kidneys showed that, as a rule, a new capsule as thick as the old one had formed by the end of ten days; if the animal was permitted to live longer than this, the capsule became thicker than normal and often became adherent to surrounding organs. Microscopic examination showed that the new capsule was fibrous in character and often dipped down into the kidney where the organ had been injured by the decapsulation, so that the appearance of early interstitial nephritis was produced in some instances.

The authors conclude from their work that from an

1. Annals of Surgery. p. 502. 1903.
2. Mittellungen aus den Grenzgebieten der Medizin und Chirurgie. vol. xii. No. 5.
3. British Medical Journal. April 9. 1904.

anatomic standpoint there is no very satisfactory explanation of the effects of decapsulation; there is no evidence that the decapsulation produces improved circulation, at any rate in acute cases, and in some cases an actual increase in the connective tissue of the organ was produced. They point out that the effect of decapsulation on chronic nephritis has so far escaped experimental study, as we know of no way of producing chronic nephritis in animals. From analogy to the effects produced in acute cases, however, it seems unlikely that a satisfactory anatomic explanation will be found. The failure to show that the good effects of the decapsulation are due to increased circulation, or to the relief of tension, which did not occur in some of their experimental cases, leads the authors to suggest that a reflex action on the sympathetic may cause the improvement. If this is the case, they argue that the so-called reni-puncture, i. e., the mere splitting of the capsule by longitudinal and transverse incisions, should be just as effective as, and much less dangerous than, decapsulation.

TRAUMATIC ASPHYXIA.

Occasionally, as a result of forcible compression of the chest for a varying period of time, with entire cessation of respiration, there occurs a condition that has been designated traumatic asphyxia or apnea. This is characterized by a discoloration confined, as a rule, to the face and the neck above the clavicles, varying from red through blue to black, and not disappearing on pressure. Some of the lesions present a petechial appearance, while others are more distinctly hemorrhagic. Subconjunctival ecchymoses likewise occur at times, and vision may be impaired. The discoloration has been attributed to extravasation of blood of varying amount as a result of compression of the thorax, without, necessarily, injury to the head itself. The increased intrathoracic pressure is transmitted to the veins of the head and the neck, to which it is limited in consequence of the absence of functionating valves.

Only a few cases of the kind in which recovery has taken place have been recorded in the literature, and an additional one has recently been put on record by Dr. H. H. A. Beach and Dr. Farrar Cobb,[1] together with a description of the minute pathology, as determined by microscopic examination of sections of the skin taken from the patient. The latter was a man, 30 years old, who had been caught and held by a moving freight-elevator, and was released in from three to five minutes. His face became black, blood escaped from his mouth and nose, and his eyes protruded. He was unconscious for a few minutes. When examined, an hour later, the man was in a state of moderate shock, with a temperature of 99.5, perfectly conscious, but dull and sluggish. The skin of the abdomen was the seat of several contusions, and a large fluctuating hematoma was present in the left loin and back, low down, toward the pelvis. The eighth and ninth ribs on the left side were fractured in the midaxillary line, and there was a moderate amount of subcutaneous emphysema for a short distance in this vicinity. The skin of the face seemed to be dotted with countless spots, from black and reddish-black to blue in color, close together, with minute intervening lines or areas of apparently normal skin. The discoloration was limited below, anteriorly, by a transverse line passing through the inner extremities of the clavicles, while posteriorly it occupied the double triangles formed by the trapezius muscles. No retinal hemorrhage was found on ophthalmoscopic examination. Extensive hemorrhage had taken place beneath the conjunctivæ. The pupils were equal and reactive to light. The urine exhibited no abnormality. On the third day the temperature rose to 106, the breathing became labored, there was slight bloody expectoration, and many râles were audible; but these conditions disappeared in the course of twenty-four hours. The hematoma on the back was aspirated six times, from one to two pints of bloody serum being withdrawn each time. The fluid, however, reaccumulated rapidly, so that, finally, a free incision and packing with gauze became necessary. On the second day, while the discoloration still exhibited its greatest intensity, pieces of skin from the affected parts were removed for histologic study. The discoloration disappeared rapidly after the third day, simply fading away and changing from a black to a leaden color and becoming cloudy, the face presenting only a suffused appearance at the end of three weeks. The subconjunctival extravasations underwent the usual changes. Microscopic examination of sections of the skin excised showed the tissues to be entirely normal and free from extravasated blood.

The practical deduction from this observation is the institution of artificial respiration, in conjunction with inhalation of oxygen, immediately after the release of an individual who has been subjected to forcible compression and presents livid or cyanotic discoloration of the face and neck.

1. Annals of Surgery, April, 1904, p. 481. See THE JOURNAL, May 7, 1904, p. 1252, ¶52.

HEALTH OF ITALIAN IMMIGRANTS.

Charities has recently published the first of a series of studies on the foreign elements in our country. The series begins with Italians, an important class of immigrants, both on account of their number (there are said to be 382,000 in New York City alone) and because they are, for obvious reasons, not as well understood by the ordinary American as immigrants from Northern Europe.

The publication consists of a number of articles by American and Italian-American social workers and physicians, and it is those by the latter, dealing, as they do, with disease among the Italian immigrants, which are of special interest to us. Dr. Rocco Brindisi of Boston takes up the question of the Italian and public health; Dr. Antonio Stella of New York, the question of tuberculosis among the Italians.

When he enters this country the Italian is usually

strong and healthy, the old and feeble are mostly excluded by our immigration laws. He is likely to be a sturdy peasant from the Southern Apennines, from Calabria, Basilicato, Abruzzi, or from Sicily, accustomed to an out-of-door life, inured to hard labor, temperate in his habits. Unfortunately, the change to this country is a severe strain on his naturally robust constitution, and, although the mortality remains low among the Italian men, the morbidity is far greater than in Italy. The severe climate is apt to cause rheumatism, bronchitis and pneumonia, and the sudden change from a vegetarian to a meat diet makes stomach troubles. As is always true of a foreign colony in which there is a great preponderance of males, venereal disease is quite frequent. The death rate from venereal disease among persons under 45 years of age in the registration area of the United States in 1900 was higher for the Italians than for any other white element, but, according to Dr. Brindisi, this is not true of the present time, owing to the increasing tendency of the men to send home for their families, and the consequent raising of the moral tone of the community. The great advantage of the Italian in his struggle with disease is his temperance as regards alcoholic drinks. Alcoholism is practically unknown among the newly immigrated, but it is a mortifying fact that almost the first lesson taught them in America is the substitution of beer and whiskey for their harmless light wines.

The woman suffers more than the man from the sudden change to this country. Accustomed to spend almost all her time in the open air, she now finds herself shut up in a crowded, insanitary tenement, and, instead of working in the fields and vineyards, she "finishes" coats and trousers for the sweaters. A too-productive maternity and a prolonged lactation add their share to the undermining of her health. The mortality among women is greater than that among men, and the mortality among children, especially the American born, is much greater. Rickets is quite common among these children; tuberculosis, acute respiratory disease and acute intestinal disease carry off many of them in early infancy. Those who live to grow up are apt to be frail and undersized, in contrast to their sturdier parents.

Dr. Stella maintains that tuberculosis is common, in spite of the low mortality record from this disease, this latter being due to the tendency on the part of Italians who are stricken with tuberculosis to go home to die. His theory is apparently borne out by the statistics of the New York Health Department, which show that the Italians stand only tenth in the list of the nationalities as far as deaths from this disease between the ages of 15 and 45 are concerned, but they come second in the list for mortality below the fifteenth year—children being generally not sent back to Italy to die. Tuberculosis among the Italians is pre-eminently a house disease. Dr. Stella speaks of houses in New York which yielded twenty-five to thirty cases each in the course of a year, and this from among a people who, in their own country, are exceptionally free from tuberculosis.

This brings us to the conclusion, inevitably, although not expressedly, drawn in the publication in question, namely, that the Italian within our gates is far more sinned against than sinning. He comes to this country largely because he is induced thereto by the golden promises of steamship immigration agents, and when here he undertakes heavy manual labor or insanitary rag-picking, cigar-making, and sweat-shop work. He lives in insanitary, crowded tenements, sunless, one might almost say airless, and often filthy, because his wages will not permit him to get better ones. Moreover, in his own country his house has always been a negligible quantity, life being spent in the fields or on the "piazza" of the town, so that he is not accustomed to fastidiousness in this respect. The filthiness of Italian tenements in this country is certainly not entirely chargeable to the tenants. According to a tenement house inspector in Philadelphia, the rooms in the tenements were often far cleaner than the halls, alleys and courts, for which the landlord is responsible. Insufficient water supply, defective drainage, dark rooms and overcrowding are conditions against which the Italian tenant is powerless. It is probable that New York, Boston and Chicago are almost as blamable in these respects as Philadelphia.

The solution for the problem of Italian immigration lies, according to these authorities, in devising means to distribute it throughout the agricultural regions of our country and to prevent congestion in cities. Agricultural colonies are already in successful operation in six states, and in them the Italian peasant finds the work, surroundings, and, to a great extent, the climatic conditions to which he is accustomed. Certainly this seems more promising than any other suggestion which has been made for the betterment of this class of immigrants.

THE CANDY THAT WE EAT.

Under the above heading is printed, in the June number of the *Ladies' Home Journal*, a well-meaning editorial directed against the filthy custom of the cheaper shops of exposing sticky candy to contamination with all sorts of floating dust and dirt. Unquestionably this practice is to be decried, and the purchase of such articles discouraged; but, unfortunately, a rather remarkable statement is made in explaining the danger of such candy. "A prominent physician, whose word is equivalent to that of highest authority," is credited with the following startling observation: Examining some of the questionable candy with his microscope, he found that "there were typhoid and malarial germs absolutely without number—the candy was literally covered with them." The discovery of and recognition of malarial germs on a foreign body is a new contribution to the habitat of the pesky protozoa, and the technic involved must be a distinct addition to any yet known to ordinary microscopists. Are we to understand that the "malarial germs" pass part of their existence in the street dirt, or did a cloud of anopheles swarm down on the exposed candy and deposit their obnoxious lodgers in its sticky sweetness? And were the malarial germs in the form of

adults, of microgametocytes, or sporozoites, or what? General interest would also be awakened by a demonstration of the peculiar morphologic characteristics developed by the typhoid bacillus, when it grows on candy, which make it so easily distinguished from the colon and other members of the group. We fear someone has been joking with Mr. Bok.

TROPICAL TROOPS IN HIGH ALTITUDES.

Perhaps one of the most interesting military expeditions from a sanitary point of view is that now being conducted by the British in their advance on the capital of Thibet. Some of the passes traversed are said to be three miles above the sea level, and it is a well-known fact that a large part of the campaign must be conducted on a plateau thousands of feet above the level of the sea. The fact that Indian troops from a tropical country are employed on this expedition, as well as Europeans, is also of interest. Hitherto, so far as the dispatches inform us, the men have not been seriously affected by the altitude, but it will be of interest to have a medical report of the results of the expedition on the physique and the health of its members. The force is not a large one, but sufficient to furnish valuable information if the facts are properly collected and collated. We trust that there are medical men connected with the expedition who are competent to make this report, and that we may have an addition to our knowledge of human endurance and sanitary science.

BOVINE AND HUMAN TUBERCULOSIS.

News comes by cable from London that the royal commission appointed nearly three years ago to investigate the connection between human and animal tuberculosis and to test the correctness of Koch's uttered opinions has reached certain conclusions that it feels justified in giving to the public, and which, in fact, refute the claim of the distinguished German bacteriologist. They say, according to the report: "We have most carefully compared the tuberculosis set up in bovine animals by material of human tuberculosis, to that set up in bovine animals by material of bovine origin, and so far we have found the one, both in its broad general effects and in its finer histologic details, identical with the other." According to the judgment of the commission, therefore, it would be unwise to modify legislative measures on the presumption that human and bovine tuberculous bacilli are specifically different or that the disease caused by the one is different from that due to the other. This is not the final official report, which will give detailed particulars, but so far as it goes may be depended on.

A DISREGARDED SOURCE OF SURGICAL INFECTIONS.

It has long been recognized that saliva is an extremely dangerous medium of infection, but it has remained for de Leon[1] to demonstrate just how frequently it may be responsible for the instances of so-called unavoidable surgical infection. From a long series of careful and well-controlled experiments, he has obtained some very striking results. It was found that on the average about two hundred words were spoken by the operator alone in an ordinary operation. On an average, in each drop of saliva occur 4,375 bacteria, and in the duration of an average operation 250,000 organisms may gain direct entrance to the wound. Among these, virulent organisms are constantly present, streptococci, diplococci and staphylococci, in order of their frequency. To avoid this source of contamination, de Leon devised a simple mouth mask which is efficacious and not burdensome and does not interfere with distinct articulation. Some bacteria were found to penetrate a gauze mouth covering, though the number was materially reduced. If experience has shown that wounds are usually capable of withstanding a large number of bacteria, it has also demonstrated that under suitable conditions a few bacteria may give rise to serious and even fatal infection. Inasmuch as these conditions may obtain in any wound, the logical deduction is obvious. It would be folly, indeed, to strain at the gnat of saliva and swallow the camel of dirty hands, but surgeons who have good personal technic and equally careful assistants should consider this fruitful source of infection, particularly where teaching makes more continuous and louder talking a necessity. (See page 1523.)

1. Arch. f. klin. Chir., 1904, lxxii, No. 4, p. 914.

LODGE PRACTICE AND THE WELL-TO-DO.

An interesting little social fact is remarked on editorially by the *Australasian Medical Gazette,* April 20. Australia is a lodge-ridden country to all appearances, and the medical profession is more or less sweated, to use the usual term; in fact, probably more so than most other countries, though the fees may not be so ridiculously small as those against which our German confrères have successfully rebelled. The *Gazette* remarks that it may be interesting to its readers as well as to the general public to know that the complaints that have been made from time to time in regard to sweating the profession by the well-to-do are not without foundation. It says it has been informed, on good authority, that one of the members of the federal ministry of Australia, whose wife is a wealthy woman, takes advantage of his membership in a friendly lodge to procure medical treatment for himself and family. This is not, it says, the first and only occasion in which a cabinet minister has availed himself of the services of a lodge doctor, but it suggests that one would think a federal minister would have had more self-respect and dignity than to get medical attendance in such a cheap way, because he happened to be a member of a friendly society. In this country we are somewhat accustomed to the fact that dispensary practice in large cities is utilized by a considerable number of well-to-do individuals. It is not an unknown experience for a dispensary physician to see his patients decked out in silks and diamonds or to find that they are extensive landlords and recipients of presumably large incomes. The remedy here, however, is patent; when the facts are known, the services are discontinued; but in a country where lodge practice is almost the rule, the public seems to lose self-respect and only endeavors to obtain the services of physicians at the cheapest possible rate. We mention this fact as something that we may

possibly yet experience. Fortunately, we have not yet seen the Secretary of the Treasury, or of State, or any other cabinet minister, utilizing lodge membership for his medical attendance.

Medical News.

DISTRICT OF COLUMBIA.

Health of the District.—The report of the health officer for the week ended May 28 shows the total number of deaths to have been 102. At the close of the report there were under treatment 9 cases of diphtheria, 21 of scarlet fever, 39 of typhoid fever and 5 of smallpox.

New Hospital.—The new home of the Episcopal Eye, Ear and Throat Hospital, Washington, was dedicated June 4 with appropriate ceremonies. The building, when complete, will have cost about $100,000. It is completely fire-proof, and is equipped with elevator and will accommodate 16 private patients and 35 ward patients, exclusive of the quarters for the resident physician and superintendent of nurses. It has separate wards for colored and white patients.

Health and Quarantine Conference.—The second annual conference of state health and quarantine officers, with the U. S. Public Health and Marine-Hospital Service, met June 3 and 4 in Washington. The president, Surgeon-General Walter Wyman, announced that there were no problems of pressing importance from a national point of view for him to present to the conference. He gave a résumé of the year's work in detail, and announced the formation of two new divisions in his department, one on zoology and one on pharmacology, and also that the Mexican authorities had agreed to co-operate with the United States in the suppression of yellow fever. The following officers were elected: President, Dr. John S. Fulton, Baltimore; vice-president, Dr. N. K. Foster, San Francisco; treasurer, Dr. James A. Egan, Springfield, Ill., and secretary, Dr. Gardiner T. Swarts, Providence, R. I.

Nostrum Fraud Order.—The postmaster general, in reply to a criticism of a lay newspaper, has given out a statement regarding the attitude of the department toward worthless nostrums and newspaper publication of obscene advertisements. He states that the department has no intention of entering on a crusade against patent medicines nor of establishing a censorship on advertisements printed in newspapers, but simply intends to correct abuses in case of obscenity and fraud, as by law he is required to do. He says that the analysis of certain so-called remedies developed the fact that in most instances the ingredients were simply starch and sugar. In a number of instances pills and drugs contained ingredients injurious to health and by law forbidden to be sold. As it appeared that certain companies were defrauding the public by means of false representations, made through the medium of the mails, the issuance of fraud order was recommended to the postmaster general and issued by him. He says the department intends to act promptly with all concerns dealing in the remedies described, though this can be brought about only through complaints received from victims and from the publication of advertisements which, in the judgment of the department, are in violation of the statute against obscenity. In the latter case, newspapers publishing such advertisements will in time come under the ban of the law, for as the advertisements are not admissible to the mails, the papers printing them must be included in the same category. The latter will have to cease printing the objectionable advertisements or will have to be refused transmission through the mails.

ILLINOIS.

Personal.—Dr. John W. Cantrell, Rochester, suffered a sprain of the ankle and severe cuts and bruises in a runaway accident May 27.——Dr. Jas. T. Crow, Carrollton, was recently adjudged insane and committed to the Illinois Central Hospital for the Insane, Jacksonville.

Tuberculosis Camp.—A camp which will accommodate 30 poor tuberculous patients was recently opened near Ottawa under the auspices of the Illinois State Medical Society. It will be in charge of Dr. James W. Pettit of Ottawa, and is expected to be virtually self-supporting.

New Hospitals Favored.—The board of commissioners of Cook County is considering the question of hospital accommodation in districts remote from the county institution. The proposition calls for the following:

An emergency hospital in the down-town district.
A centrally located hospital in the manufacturing district in the extreme southern part of the city.
A hospital conveniently located for the manufacturing district as well as the stock yards on both sides of the river.
A hospital conveniently located for the manufacturing district in that part of the town.

The proposals were favored by members of the board and referred to the finance committee.

Chicago.

Two Spitters Arrested.—After a long period of quiescence the anti-spitting ordinance was remembered last week, when two men were arrested for expectorating on the sidewalk.

Personal.—Dr. George W. Hall and family have sailed for Europe.——Dr. David F. Monash sails for Europe June 14.——Dr. Charles Davison has been nominated for trustee of the University of Illinois.

May's Deaths.—During May 2,225 deaths occurred, equivalalent to an annual death rate of 13.6. This is nearly 13 per cent. lower than the average mortality for May, and nearly 20 per cent. less than the mortality for May, 1903.

Neck and Neck.—The week ended June 4 is the first time since last October that the weekly pneumonia deaths have not exceeded the deaths from consumption. The 67 deaths from each cause represent 14.8 per cent. of the total mortality, instead of, as heretofore, 10.7 per cent. for consumption and 22 per cent. for pneumonia.

INDIAN TERRITORY.

Medical Bill Passed.—Congress has passed the bill regulating the practice of medicine in the Indian Territory. It provides for a medical examining board in each district composed of three physicians appointed by the district judge.

Examining Boards Appointed.—Drs. Benjamin F. Fortner, Vinita, Jesse C. Bushyhead, Claremore, and William L. McWilliams, Miami, have been appointed members of the territorial medical board for the northern district.——For the Chickasaw Nation, the following have been designated as the medical examining board: Drs. Jerome C. McNees, Ardmore, E. E. Chivers, Mannsville, and William L. Peters, Chickasha.——The new medical examining board for the Choctaw Nation is composed of Drs. Alfred Griffith, South McAlester, J. B. Smith, Durant, and B. W. Caldwell, Hugo.

South McAlester's Hospitals.—South McAlester, a city of 10,000 inhabitants has two hospitals; All Saints' and Sisters of Mercy. The former has a very efficient training school for nurses. The latter has recently opened a bacteriologic and pathologic laboratory and an outdoor clinic, with the following staff: General medicine, Drs. Alfred Griffith, and J. E. Little; diseases of women, Dr. William B. Pigg; diseases of children, Dr. Thomas S. Chapman; genitourinary diseases, Dr. H. Earle Williams; diseases of rectum, Dr. Rufus Crabill; dermatology, Drs. Robert A. Munn and McClellan Wilson, and surgery, Dr. Troy.

Chickasaw Medical Association.—The ninth semi-annual meeting of the association was held in Ardmore, May 10 and 11. The attendance was the best in the history of the organization, and there were 23 applications for membership. The officers elected were as follows: President, Dr. John D. Batson, Marietta; vice-president, Dr. Risdon D. Moore, Ardmore; secretary-treasurer, Dr. Joseph W. Shelton, Wynnewood; delegates to the Indian Territory Medical Association, Drs. James W. Gilbert, Roff, and Joseph W. Shelton, Wynnewood; alternate, Dr. Herbert P. Wilson, Wynnewood, and censors, Drs. Thomas S. Booth, Ardmore, three years, James F. Roberson, Duncan, two years, and John R. Runyan, Ada, one year. Pauls Valley was chosen for the next meeting place.

MARYLAND.

Baltimore.

May Health Report.—During May, 869 deaths were reported. Measles, scarlet fever and smallpox were prevalent, 108 cases of the first, 192 of the second, and 20 cases of the third being reported to the health department.

Free Baths Open.—The Free Public Bath Commission announces that the summer bathing pools and women's baths are open for the season. The Walters Public Baths, which are open the whole year, have had more than 21,000 patrons in the last two weeks.

Personal.—Dr. Charles E. Simon has gone to Chester, Nova Scotia, for the summer.——Dr. Champe S. Bradfote disappeared from his home here May 11. He was a native of Texas, and

for some time connected with the teaching staff of Jefferson Medical College.——Dr. H. M. Cohen sailed for Europe May 20.

Vaccine Physicians Appointed.—The following have been appointed extra vaccine physicians: Drs. Hugo Weusthoff, Melchija Spragins, Frank O. Miller, R. Perry Carman, Joseph H. Brewster, W. De F. Olmstead, W. K. White, Christian Waldkoenig, J. Charles Beck, John C. Travers, Isham R. Page, Edgar M. Parlett, Samuel Weinberg, J. D. Quinn, W. H. Clendinen Teal, Howard E. Wooden, Edward W. Gilliam, J. H. Jenkins, W. L. Nicholls, Martin A. O'Neill, William H. Pearce, Fred C. Jewett, Jay H. Iglehart, Thomas L. Savin, and Daniel W. Smith.

MASSACHUSETTS.

Personal.—Dr. William A. Brooks, Jr., Boston, recently sailed for a two months' trip in Europe.

Transportation of Contagious Cases.—A bill has been signed by the governor perfecting the present law so that the State Board of Charity may remove from one place to another a person suffering from a contagious disease. This legislation was made necessary by reason of a case of leprosy recently discovered in the Cape Cod section.

New Hospital in Brookline.—The new private hospital on Corey Hill, Brookline, was opened June 2. The hospital has been constructed after the most approved plans and has 35 beds. Among the Boston physicians who have official connection with the institution are: Drs. Maurice H. Richardson, Charles B. Porter, Joel E. Goldthwait, James G. Mumford, Franz Pfaff, Elliott G. Brackett and William A. Brooks, Jr.

More Anthrax in Lynn.—Another case of anthrax has appeared in Lynn. The victim was not a leather worker, but a wealthy coal dealer. The point of infection was at the angle of the jaw, and owing to prompt surgical interference, recovery seems assured. The source of infection is entirely a matter of conjecture. There have been 18 cases of anthrax in Lynn during the past three years; 3 cases, with 2 deaths, within three months. This latest case has aroused the board of health to energetic action, and with the co-operation of specialists, stringent measures are likely to be adopted, both as regards prophylaxis and the isolation of any case that may occur.

NEW YORK.

To Care for Advanced Consumptives.—The Reception Hospital has been incorporated to maintain a hospital in North Elba, Saranac Lake village, which is intended to relieve a class of sufferers who are turned away everywhere else because their cases are too far advanced. Drs. E. L. Trudeau and Edward R. Baldwin are on the board of managers.

Transfers in State Hospitals.—At a meeting of the State Commission in Lunacy the following transfers of superintendents were ordered to take place June 1: Dr. O. M. Dewing, from the Long Island State Hospital, King's Park, to the Long Island State Hospital, Flatbush; Dr. W. A. Macy, from the Willard State Hospital to the Long Island State Hospital, King's Park, and Dr. R. M. Elliott, from the Long Island State Hospital, Flatbush, to the Willard State Hospital.

Criminal and Insane Aliens.—The Department of Commerce and Labor is compiling an accurate list of all alien inmates of institutions maintained by charity. This list for the city and state of New York has been completed and shows that the number of aliens of all classes supported in public institutions of this state is 13,143. The penal institutions of New York City contain 1,090 alien inmates, and in the state there 1,103. The alien insane of New York number 6,148, of whom 4,224 are in New York City alone. Confined in city homes, juvenile asylums, poor-houses and other institutions not shown in the statistics there are 2,991. The hospitals of the city of New York contain 1,105 alien inmates, and those of the state 121 more. This gives a total of 60 per cent. of the insane as aliens.

NEW YORK CITY.

Knopf's Essay Translated in Japanese.—Dr. S. A. Knopf's essay "Tuberculosis as a Disease of the Masses and How to Combat It," received the Berlin Tuberculosis Congress prize in 1899, has now been translated into Japanese by Dr. Goro-Shibayama, with a preface by Professor S. Kitasato.

No Abatement in Meningitis.—With a death-list of 80 from cerebrospinal meningitis, as against 12 for the corresponding week in 1903, there is little or no decrease in this disease. Of the 80, 30 were under five years of age; 26 between the ages of 5 and 15; 17 between 15 and 25, and 7 between 25 and 45.

Personal.—Dr. Spratling will enter on his duties as superintendent of Bellevue and Allied hospitals June 15.——Dr. Thomas F. Reilly was thrown from his runabout May 30, and severely cut and bruised about the head.——Dr. Stephen Cook has been elected president of the Board of Police Surgeons.

Contagious Diseases.—There were reported to the sanitary bureau of this city for the week ended May 28, 1,107 cases of measles, with 32 deaths; 376 cases of diphtheria, with 49 deaths; 312 cases of scarlet fever, with 22 deaths; 1 case of smallpox; 68 cases of varicella; 403 cases of tuberculosis and 158 deaths, and 22 cases of typhoid fever, with 14 deaths.

Sea-Shore Camp for Consumptives.—The fresh-air department of the New York Association for Improving the Condition of the Poor invites applications for admission to its seaside camp at Coney Island for children suffering from tuberculosis of bones and glands. If the experiment proves that the American seashore, like that of France, affords the most favorable opportunity for treating non-pulmonary forms of tuberculosis, the association will endeavor to secure funds for a permanent seaside sanatorium.

Hospital News.—A six-story fire-proof annex is to be added to St. Vincent's Hospital at an estimated cost of $250,000.——Beth Israel Hospital has purchased property adjoining its present site and $3,000 has been added to the building fund during the past week.——The French Benevolent Society transferred the title of the old French Hospital May 31. It has built a new hospital on 34th Street, between 9th and 10th avenues.——Mt. Sinai Hospital has acquired a plot of ground 200 feet by 170 feet; at the northeast corner of 66th Street and Lexington Avenue.

Tuberculosis Among Street Cleaners.—Owing to the reports which have been circulated as to the large number of street cleaners suffering from tuberculosis, the street-cleaning commissioner, Dr. Woodbury, on June 1, began a personal investigation of the physical condition of the 6,000 men in his department, assisted by six physicians from the health board. About 400 men have been examined thus far, and already a number of cases of tuberculosis have been found, but Dr. Woodbury thinks that the percentage will not be by any means as great as has recently been stated. The commissioner proposes to send the more serious cases to the Adirondacks. He could not legally use the city's money for this purpose, but says that he will look after the financial side, and that if the burden is too heavy, his friends will come to his assistance.

PENNSYLVANIA.

Philadelphia.

Bequests.—In disposing of her estate of $172,000 the late Mary J. Mills made bequests to charity as follows: The Home for Incurables, $5,000 for the maintenance of a free bed in the cancer annex of that institution, and Children's Department of the Episcopal Hospital $5,000 for a free bed.

War on Cheap Soda Fountains.—Dairy and Food Commissioner Warren has instituted a campaign against the dispensers of deleterious and impure summer drinks. In the poorer sections of the city a large quantity of summer drinks are used, in which cheap and impure syrups are used. Commissioner Warren's deputy is assigned to work principally in this field.

Rush Monument.—Dr. James C. Wilson, professor of medicine in Jefferson Medical College, has been selected to deliver the eulogy of Rush at the unveiling and dedication of the monument to Benjamin Rush in Washington on June 11. Dr. Wilson's address will appear in THE JOURNAL, June 18. Acceptance of the monument as a gift to the nation will be acknowledged by President Roosevelt.

Against Dusty Streets.—As a result of the efforts of the county medical society and the State Society for the Prevention of Tuberculosis, in pointing out dusty streets as a medium in the dissemination of tuberculosis, an appropriation of $4,000 has been made by Council to abate this nuisance by systematic sprinkling. At first only the busy thoroughfares in the central portion of the city will receive attention, but it is hoped that after a time the scope of the work will widen.

Wills Hospital Will Entertain.—The surgical staff of Wills Hospital, Race Street, between Eighteenth and Nineteenth streets, announces a series of special clinics to be held on June 13 and 14, at 2 p. m., to which delegates and members of the association are invited. Prof. A. Maitland Ramsay, M.D., Glasgow, Scotland, will operate. On the evening of June 13, after a meeting of the Wills Hospital Ophthalmic Society, a

reception will be tendered Professor Ramsay by the attending surgeons of the hospital, and after the clinic of June 14 the assistant surgeons will be the hosts at a trolley ride and supper at Willow Grove Park.

Off for Europe.—Dr. J. William White sailed for Europe May 14.——Dr. Leonard Pearson of the staff of the Henry Phipps Institute, sailed for Europe May 30, to study particularly the serum treatment of tuberculosis. Dr. Pearson will begin in England and work through the north of Europe. Dr. Ravenel, who is already in Europe, will start in Italy and cover the south of Europe. The two will meet in Berlin, and finish their work there.——Dr. Lewis W. Steinbach and family sailed for Europe May 10.

Health Report.—There has been a decrease of more than 50 cases in all forms of contagious disease during the last week, as compared with the previous week, and the deaths from contagious diseases were 29 less than for the week ended May 21. There were only 102 new cases of typhoid reported. This is a decrease of 18 for the week. The deaths from all causes were 465, a decrease of 29 over the previous week and an increase of 38 over the corresponding period of last year. There were 12 deaths from appendicitis, an unusually high number, and 2 deaths from tetanus.

Work of Hospitals.—The work done in the German Hospital from April 21 to May 26 is given as follows: Patients admitted, 310; discharged, 299; deceased, 21; remaining, 182, including 192 present at the beginning of the period. In the dispensary 4,308 patients were treated, of whom 830 were new and 186 victims of accidents.——At the annual meeting of the trustees of the Jewish Hospital the following report indicating the amount of work done for the year was made: 6,911 patients were treated; 5,517 operations were performed, and 15,876 patients visited the dispensary. In the surgical department of the institution the fatalities were less than any year since the hospital was established.

GENERAL.

American Dermatological Association.—At the twenty-eighth annual meeting held at Niagara Falls, on June 2 and 3, the following officers were elected: President, Dr. William T. Corlett, Cleveland; vice-president, Dr. Frank H. Montgomery, Chicago; secretary and treasurer, Dr. Charles J. White, Boston, and member of council, Dr. John A. Fordyce, New York City. It was decided to hold the next meeting of the association in New York City, Dec. 28, 29 and 30, 1905.

American Pediatric Society.—At the annual meeting held in Detroit, May 30 and 31 and June 1, the following officers were elected: President, Dr. Charles G. Jennings, Detroit; vice-presidents, Drs. Charles G. Kerley, New York City, and Thompson S. Westcott, Philadelphia; secretary, Dr. Samuel S. Adams, Washington, D. C.; treasurer, Dr. J. Park West, Bellaire, Ohio, and recorder and editor, Dr. Linnaeus A. La Fetra, New York City. The 1905 meeting will be held June 19, 20 and 21, at Sagamore Hotel, Lake George.

Quarantine Officer for Panama.—Admiral Walker, chairman of the Isthmian canal commission, on May 11, requested that Surgeon H. R. Carter of the Public Health and Marine-Hospital Service be ordered to report to the Isthmian Canal Commission for duty on the Isthmus of Panama in connection with quarantine matters there. The request has been complied with by the Secretary of the Treasury. The selection of Surgeon Carter is a very wise one, as his wide experience as a quarantine officer and sanitarian fits him peculiarly for the problems and responsibilities of quarantine work on the Isthmus.—— On request of the Department of State, the Panama government on May 21, appointed Assistant-Surgeon Claude Pierce, U. S. P. H. and M.-H. Service, health officer in charge of the quarantine service at the port of Panama.

Quarantine in Panama.—Some months ago, in response to a request made by the Panama government, officers of the U. S. Public Health and Marine-Hospital Service stationed at Central and South American ports were instructed to inspect and sign bills of health for vessels bound for ports in Panama, under the United States quarantine regulations, and to treat them as if they were destined for the United States ports. In this way that very necessary adjunct of modern quarantine—inspection at ports of departure—was added to the measures already taken to protect the Isthmus. The Panama government, however, omitted to issue proper orders to its port authorities prohibiting entry of vessels without these very essential bills of health signed by the Public Health and Marine-Hospital Service officers. They also failed to inform the steamship companies of the necessity of complying with the new requirement. The presence of plague in Callao, Peru, and yellow fever in Guayaquil, Ecuador, and the intimate relations existing between these ports and the Isthmus, caused considerable apprehension among sanitary authorities in view of the lack of adequate quarantine inspection at the port of Panama and the fact that steamships bound for Panama from these infected ports frequently left for Panama without obtaining a bill of health from the Public Health and Marine-Hospital Service officer on duty in the United States Consulate. Accordingly, representations were made to the Panama government through the State Department that these bills of health should be demanded of vessels on arrival at Panama. As a result, the Panama government issued a decree, April 30, by which vessels from ports in which officers of the Public Health and Marine-Hospital Service are stationed must have bills of health viséed by these officers, and informing the steamship companies that in future they must comply with the regulations dictated, or that shall be dictated in the future, by the medical officers of the U. S. Public Health and Marine-Hospital Service in foreign ports.

CANADA.

Not to Raise Ontario Standard.—The medical faculty of Queen's University has decided that it would not be wise to raise the standard of medical matriculation in Ontario, believing that the requirements of the Ontario Medical Council are sufficiently high.

Montreal General Hospital Report.—During the first quarter of 1904 the Montreal General Hospital treated to a conclusion 754 patients. Of this number 69 died, and if the 19 deaths occurring within three days of admission were omitted, the mortality would be 6.6 per cent. for the quarter. In the outdoor departments there were 9,204 consultations, 244 more than in the corresponding quarter for 1903. Dr. McCrae has resigned as resident pathologist and his place has been filled by the appointment of Dr. D. B. Gillies. The medical superintendent, Dr. W. G. Turner, will be succeeded June 1 by Dr. Roland P. Campbell. A site has been secured for the new contagious diseases hospital to be erected in connection with this institution. It will cost about $150,000, and of this sum only $35,000 has been subscribed.

Provincial Consumption Sanitaria.—The Canadian Association for the Prevention and Cure of Tuberculosis has appointed a special committee, consisting of Dr. P. H. Bryce (convener), Dr. J. D. Lafferty, Calgary, N. W. T., Dr. C. J. Fagan, Victoria, B. C., Dr. Gordon Bell, Winnipeg, its secretary, and a number of laymen, to take steps to secure the co-operation of municipalities, provincial governments, and the dominion government, for the establishment of one large sanitarium in each province. Another committee was appointed to organize a branch at Ottawa to co-operate in the establishment of a sanitarium for Ottawa and the surrounding country. The secretary of the association was instructed to deliver lectures through Ontario during June and July and in the maritime provinces during August and September.

FOREIGN.

International Antituberculosis Congress.—Among the resolutions adopted at the International Antituberculosis Congress held at Copenhagen during the last week in May, were those favoring the study of hygiene in schools and universities, uniform schedules for tuberculosis statistics, the appointment of a commission to consider the question of the predisposition to tuberculosis, and the enforcement of regulations against expectoration in places of public assemblage. Paris was selected as the place for the next congress which will be held in 1905.

The New Departure in the History of Sanitation.—The questions of proper water supply, drainage and other sanitary measures are generally decided by each town and city for itself, and are too often made political issues. This has been especially the case in France, the local political parties generally assuming the advocacy or denunciation of such measures as their platforms, and the taxpayers voting against anything tending to increase the taxes. This has all been done away with now. The central government has taken the matter in hand, and made the prefects at the head of the various departments the arbiter in the matter. The prefects are administrative officers appointed by the central government, and hence are independent of the local vote. The new public health law now in vogue confers on the prefect the power to render sanitary measures obligatory, and to see that they are enforced, his authority backed by the central government. One clause in the law

provides for the co-operation of several communities to carry out some scheme of sanitation in which all are interested. Another declares that sources of water supply may be condemned and purchased with a protecting zone around them by the local authorities. The power to condemn insanitary dwellings and areas is also conferred on the prefect who is held responsible for the enforcement of the measures decided on by the departmental board of health. The intervention of the prefect is sanctioned only when the local authorities fail to do their duty within a reasonable interval. He is called on to act when the proportion of deaths in a commune during three consecutive years has exceeded that of the country at large, and also in emergencies. Toulon and Havre have long had typhoid fever endemic and cholera frequently epidemic, and yet nothing has been done to remedy the unsanitary conditions that have prevailed there for centuries. The law heralds a new departure in the history of sanitation, making suitable local measures compulsory. The legislators are now debating on the provision for special assessments for these works, apportioning the expense between the commune and the department. The *Lancet* of May 21 gives further details of the new law.

Marriages.

W. H. TAYLOR, M.D., Manitoba, to Miss Aimee De Vere of Chicago, June 8.

CHARLES H. FEGERS, M.D., to Miss Florence Searles, both of McHenry, Ill., June 8.

GUY GRIGSBY DOWDALL, M.D., to Miss Winifred Warner, both of Clinton, Ill., June 2.

JOHN H. BLACKBURN, M.D., to Miss Bessie Hatcher, both of Bowling Green, Ky., May 25.

OLLINE BURTON DOYLE, M.D., Fresno, Cal., to Miss Ruby H. Perkins of Visalia, Cal., May 10.

SAMUEL CHARLES EMLEY, M.D., Wichita, Kan., to Miss Lalage Hall of Wellington, Kan., June 8.

ABRAHAM H. FAITH, M.D., to Miss Nellie Head, both of Washington, Ind., at Indianapolis, May 28.

H. M. COHEN, M.D., Baltimore, to Miss Etta Rothband of Manchester, England, at Manchester, June 8.

ROBERT W. HASTINGS, A.M., M.D., Brookline, Mass., to Miss Edith A. Earhart of Hagerstown, Md., June 8.

J. HESTER WARD, M.D., Johns, Ala., to Miss Jetie Stone of Tuscaloosa, Ala., at Suearnoochee, Miss., May 22.

Deaths.

Frederick Christian Schaefer, M.D. Chicago Medical College, 1876, a member of the American Medical Association, Illinois State Medical Society, Chicago Medical Society, Chicago Medico-Legal Society, and Chicago Pathological Society; professor of anatomy and clinical surgery in Northwestern University Medical School for 9 years, professor of surgery Post-Graduate Medical School and Hospital; surgeon-in-chief St. Hedwig's Hospital; surgeon to Charity, Chicago and Post-Graduate hospitals; gynecologist to St. Elizabeth's Hospital; consulting surgeon to Mary Thompson Hospital and the Illinois Charitable Eye and Ear Infirmary, well known as a surgeon and teacher, died at his home in Chicago, June 3, from acute gastritis, after an illness of six hours, aged 55.

George W. Green, M.D. University of Michigan Department of Medicine and Surgery, Ann Arbor, 1862, a member of the American Medical Association, and of the Michigan State Medical Society; assistant surgeon of the Twenty-eighth Michigan Volunteer Infantry in the Civil War; prominent as a specialist in diseases of the eye, ear, nose and throat, died at his home in Battle Creek, Mich., May 27, aged 67.

Henry M. Replogle, M.D. Rush Medical College, Chicago, 1895, a member of the American Medical Association, was injured in a runaway accident near his home in Udell, Iowa, May 27, and died a short time after from internal hemorrhage, aged 38.

Lyman M. Beckes, M.D. Medical College of Indiana, Indianapolis, 1887, died at his home in Vincennes, Ind., May 25, from septic meningitis following an operation for suppurative otitis media, after an illness of ten days, aged 42.

Henry John Hutchinson, M.D. University of Minnesota College of Medicine and Surgery, 1904, who was graduated May 28, was drowned by the capsizing of a boat in the Dalles of the St. Croix River, Minnesota, May 29, aged 25.

James Robinson Gray, M.D. Jefferson Medical College, Philadelphia, 1897, of Youngstown, Ohio, died at the home of his mother in Pittsburg, Pa., May 26, from pulmonary tuberculosis, after an illness of one year, aged 32.

Martin H. Head, M.D. Kentucky School of Medicine, Louisville, 1851, assistant surgeon of the Fourteenth Illinois Volunteer Infantry during the Civil War, died at his home in Carlinville, Ill., April 26, aged 77.

Rollo Campbell, M.D. University of Bishop's College, Faculty of Medicine, Montreal, 1887, of Montreal, died at the Western Hospital in that city, May 30, from typhoid fever, after an illness of three weeks.

Clinton D. Baker, M.D. Medical Department of Western Reserve University, Cleveland, 1892, committed suicide at his office in Conneaut, Ohio, May 26, by severing veins at his wrists and elbow.

Theodore Osgood Cornish, M.D. Vermont Medical College, Woodstock, 1851, one of the founders of the Thurber Medical Association, died at his home in South Boston, Mass., May 23, aged 80.

Arthur Maxwell Line, M.D. College of Physicians and Surgeons in the City of New York, 1899, died suddenly from heart disease at his home in Wilmington, Del., May 29, aged 33.

J. H. Turner, M.D. Albany (N. Y.) Medical College, 1845; surgeon of the First Wisconsin Volunteer Cavalry in the Civil War, died at his home in Berlin, Wis., May 26, aged 85.

Thomas N. Clark, M.D. Galveston (Texas) Medical College, 1871, died at his home in Reagan, Texas, May 20, from organic heart disease, after an illness of more than six years.

John C. Sill, M.D. New York University, New York City, 1848, ex-president of the Washington County Medical Society, died at his home in Argyle, N. Y., May 23, aged 80.

Clinton L. Shoemaker, M.D. Medico-Chirurgical College of Philadelphia, 1903, died at his home in Philadelphia, May 29, from spinal meningitis, aged 33.

Charles L. Parker, M.D. Albany (N. Y.) Medical College, 1892, died at his home in Onondaga Hill, N. Y., May 23, after an illness of six weeks, aged 47.

John L. Johnstun, M.D. 1840, surgeon in the United States Army in both the Mexican and Civil wars, died at his home in Craig, Mo., recently, aged 86.

James P. Gwynn, M.D. Southern Medical College, Atlanta, Ga., died at his home in Bogart, Ga., May 27, from malignant disease of the throat, aged 54.

Walter S. Jones, M.D. Detroit Medical College, 1881, died at his home in Corunna, Mich., May 31, from Bright's disease, after a long illness, aged 48.

Anna E. Park, M.D. Philadelphia, 1860, died from pneumonia at her home in New York City, May 30, after an illness of five days, aged 74.

N. S. Whetstone, M.D. Medical College of the State of South Carolina, Charleston, 1860, died at his home near Branchville, S. C., May 25, aged 73.

Marion C. Wells, M.D. Washington University School of Medicine, Baltimore, 1871, died from appendicitis at his home in Searcy, Ark., May 29.

Peter H. Pursell, M.D. University of Pennsylvania, Philadelphia, 1864, of Chicago, died at St. Louis, May 28, from apoplexy.

Orville A. Tillotson, M.D., died at his home in Titusville, Pa., May 24, from pneumonia, after an illness of one week, aged 47.

James M. Branson, M.D. Illinois, 1878, died at his home in Keenes, Ill., April 14, from an overdose of a drug, aged 67.

William L. Purple, M.D. Albany (N. Y.) Medical College, 1875, died at his home in Albany, N. Y., May 25.

James D. Wallis, M.D. University of Louisville, 1858, died at his home in Nashville, Tenn., May 25, aged 75.

Solon R. Boynton, M.D. Missouri, 1883, died at his home in Sparta, Ill., May 14, from diabetes, aged 54.

Silas C. Lybarger, M.D. Ohio, 1864, died at his home in Ganges, Ohio, May 20, aged 74.

Deaths Abroad.

E. J. Marey, M.D., the inventor of the sphygmograph, died at Paris, May 16, aged 74. His research on the physiology of the heart and respiration soon won for him international fame as

his publications on the subject were issued. He invented the sphygmograph in 1860, and became professor of natural history at the Collège de France in 1867, where he continued his brilliant work in experimental physiology, and especially the application of instruments of precision in its study. He is one of the last to go of the brilliant group which included Claude Bernard, Brown-Séquard and Vulpian.

Gilles de la Tourette, M.D. professor agrégé at Paris, died at Lausanne May 23. He was one of the best-known Paris neurologists until his health broke down four years ago. His name is associated with the *maladie des ties*, which he was the first to describe. He was also editor of the *Iconographie de la Salpêtrière*.

P. Tommasoli, M.D., professor of dermatology and syphilography at Palermo, died there May 3, aged 46. Among his latest works were his communications on the advantages of intravenous injections of sublimate as a means of aborting syphilis.

A. Scherman, M.D., died at Budapest, April 28, aged 62. He was the official head of medical affairs in his city, and it is to his efforts that is attributed the reduction of the mortality from 42 per 1,000 when he assumed office, to the present death-rate of 18 per 1,000.

G. Karamitsas, M.D., professor of clinical medicine at Athens, died in Athens, May 2, aged 70. He studied medicine in Germany and translated some of the German text-books into Greek and was also the editor of the Greek medical journal *Asklepios*.

Dr. Vorster, director of the public insane asylum near Strasburg, was stabbed by one of the patients in April and succumbed to his injuries May 4. The patient had managed to make a dagger out of a scrap of metal.

C. De Vincentiis, M.D., professor of ophthalmology at Naples, died at Naples, May 28.

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, for the week ending June 4, 1904:

Jean, George W., asst.-surgeon, ordered to Fort Jay, New York, for temporary duty.

Snoddy, Cary A., asst.-surgeon, relieved from duty as surgeon on the transport *Sherman*, to take effect on the next arrival of that transport at Manila, and will then report to the commanding general, Philippine Division, for assignment to duty.

Stiles, Henry R., asst.-surgeon, left San Francisco on sick leave of absence.

Harvard, Valery, asst.-surgeon general, and Lyster, Theodore C., asst.-surgeon, left West Point, N. Y., with cadets en route to the Louisiana Purchase Exposition, St. Louis.

Woodruff, Charles E., surgeon, left U. S. Army General Hospital, Presidio of San Francisco, on thirty days' leave with permission to apply for two months' extension.

Gorgas, William C., asst.-surgeon general, relieved from duty as chief surgeon, Department of the East, and to report to Isthmian Canal Commission for duty.

DeWitt, Wallace, asst.-surgeon, relieved from duty at Louisiana Purchase Exposition, St. Louis, and ordered to Fort Washakie, Wym., for duty.

Cowper, Harold W., asst.-surgeon, appointed first lieutenant and asst.-surgeon U. S. Army, to rank from May 19, 1904.

Torney, George H., deputy surgeon general, left San Francisco en route to Washington, D. C., with insane patients. Reported in person at surgeon-general's office.

Mason, Charles F., surgeon, left Fort Sam Houston, Texas, on four months' leave of absence.

Owen, Leartus J., asst.-surgeon, assigned to duty at Fort Myer, Va.

Zinke, Stanley G., asst.-surgeon, assigned to duty at Fort Riley, Kan.

Culler, Robert M., asst.-surgeon, assigned to duty at Fort Jay, N. Y.

Weed, Frank W., asst.-surgeon, assigned to duty at Fort McHenry, Md.

Wickline, William A., asst.-surgeon, assigned to duty at Fort Ethan Allen, Vt.

Miller, Albert L., contract surgeon, assigned to duty in the Philippine Division, and sailed from San Francisco for Manila on the *Sheridan* June 1.

Halsell, John T., contract surgeon, left Fort McIntosh, Texas, May 27, on leave of absence for one month.

Cooke, Robert P., contract surgeon, granted leave of absence for one month from Fort Wood, N. Y.

Jones, John F., contract surgeon, ordered from Fort Totten, N. Y., to Fort Jay, N. Y., for temporary duty.

Brown, Wilmont E., contract surgeon, relieved from duty at Fort Casey, Wash., and assigned to Fort Walla Walla, Wash., for duty.

Slater, Ernest F., contract surgeon, left Fort Hancock, N. J., May 30, for temporary duty at Fort Howard, Md.

Kellogg, William V., contract surgeon, left Fort Sill, Okla., May 24, on sick leave for two months.

Chambers, William H., contract dental surgeon, ordered from Atlanta, Ga., to Fort Fremont, S. C., for two weeks' duty, and thence to Forts Moultrie, S. C., and Caswell, N. C., for one month each.

Voorhies, Hugh G., contract dental surgeon, directed to proceed from Fort Ethan Allen, Vt., to Fort Hancock, N. J., about June 15.

Kuhn, Charles F., contract surgeon, began leave of absence for two months from the Philippine Division June 1.

Rebert, Michael A., contract surgeon, assigned to duty as surgeon of the transport *Sumner*.

McCall, James H., contract surgeon, when relieved at Columbia Arsenal, Tenn., will proceed to Fort Moultrie, S. C., for duty.

Navy Changes.

Changes in the medical corps, U. S. Navy, for the week ending June 4, 1904:

Kite, I. W., surgeon, detached from the *Maine* and ordered to the Naval Hospital, Pensacola, Fla., for treatment.

Fauntleroy, A. M., asst.-surgeon, detached from the *Scorpion* and ordered home and to await orders.

Richardson, R. R., asst.-surgeon, detached from the Naval Hospital, Pensacola, and ordered home to await orders.

Taylor, J. L., A. A. surgeon, detached from duty with naval recruiting party No. 6, May 28, and ordered to duty at the Naval Hospital, Pensacola, Fla.

Richardson, F. A., A. A. surgeon, detached from the Naval Hospital, Newport, R. I., and ordered to the *Scorpion* June 2.

Murphy, J. F., asst.-surgeon, detached from the *Isle de Cuba* and ordered home and to wait orders.

Owens, W. D., asst.-surgeon, ordered to the Naval Hospital, Newport, R. I.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the surgeon general, Public Health and Marine-hospital Service, during the week ended June 3, 1904:

SMALLPOX—UNITED STATES.

Alaska: May 17, Hoonah, 3 cases; Killisnoo, 2 cases; Juneau, May 15, 1 case.
Florida: Jacksonville, May 22-28, 2 cases.
Georgia: Macon, May 22-28, 3 cases.
Illinois: Chicago, May 22-28, 6 cases.
Iowa: Des Moines, April 1-30, 8 cases; Dubuque, May 15-28, 1 case.
Kentucky: Covington, May 22-28, 1 case.
Louisiana: New Orleans, May 22-28, 11 cases, 2 imported.
Maine: Jonesport, May 26, 23 cases.
Maryland: Baltimore, May 22-28, 5 cases, 1 death.
Michigan: May 22-28, Detroit, 2 cases; Grand Rapids, 2 cases.
Missouri: St. Louis, May 22-28, 4 cases, 2 deaths.
New Hampshire: Manchester, May 22-28, 3 cases.
New York: New York City, May 22-28, 1 case.
Ohio: May 22-28, Bucyrus, 13 cases; Dayton, 4 cases, 1 death; May 21-27, Cincinnati, 11 cases, 2 deaths; Cleveland, 2 cases; Hamilton, April 24-30, 6 cases.
Pennsylvania: Butler, April 24-30, 1 case; May 22-28, Johnstown, 5 cases; Philadelphia, 11 cases, 2 deaths; Pittsburg, 1 case, 1 death.
South Carolina: Greenville, May 15-28, 5 cases.
Tennessee: May 22-28, Memphis, 7 cases; Nashville, 8 cases.
Utah: Salt Lake City, May 15-21, 2 cases.
Virginia: Pocahontas, May 1-31, 2 cases.
Washington: Tacoma, May 17-23, 1 case.
West Virginia: Martinsburg, April 4-May 13, 20 cases, 1 death.
Wisconsin: Milwaukee, May 22-28, 7 cases.

SMALLPOX—FOREIGN.

Austria-Hungary: Prague, May 1-7, 4 cases.
Belgium: Antwerp, May 8-14, 2 cases, 3 deaths.
Columbia: Barranquilla, May 2-16, 3 deaths.
France: May 8-14, Lyons, 2 deaths; Paris, 17 cases, 3 deaths.
Great Britain: May 8-14, Dundee, 2 cases; Edinburgh, 2 cases; Leith, 1 case; London, 26 cases; Newcastle-on-Tyne, 5 cases; Nottingham, 12 cases, 1 death; Glasgow, May 14-20, 11 cases, 3 deaths; Liverpool, May 15-21, 1 case; Sheffield, May 1-14, 4 cases, 1 death.
India: Bombay, April 27-May 3, 17 deaths; Calcutta, April 24-30, 5 deaths; Karachi, April 25-May 1, 4 cases, 2 deaths.
Japan: Nagasaki, April 21-30, 125 cases, 23 deaths.
Java: Batavia, April 17-23, 12 cases, 1 death.
Mexico: City of Mexico, May 9-15, 7 cases, 2 deaths.
Netherlands: May 15-21, Amsterdam, 1 case; Rotterdam, 4 cases.
Russia: Moscow, May 1-7, 12 cases, 3 deaths.
Spain: Barcelona, May 1-10, 6 deaths.
Straits Settlements: Singapore, April 10-16, 1 death.
Turkey: Constantinople, May 9-15, 3 deaths; Smyrna, April 25-May 1, 2 deaths.

YELLOW FEVER.

Costa Rica: Limon, May 28, present.
Mexico: May 15-21, Coatzacoalcos, 4 cases, 1 death, 2 cases imported; Merida, 3 deaths; Tehuantepec, 3 cases, 1 death; Jalupan, May 27, 1 case.

CHOLERA.

India: Calcutta, April 23-30, 103 deaths.

PLAGUE.

Arabia: Aden, May 31, present.
China: Canton, May 26, spreading; April 15, Fu Shan, 50 deaths; Sun Ui, 20 deaths.
Egypt: April 17-23, 42 cases, 23 deaths.
India: Bombay, April 27-May 3, 471 deaths; Calcutta, April 24-30, 270 deaths; Karachi, April 25-May 1, 242 cases, 206 deaths.
New Zealand: Auckland, April 27, still present.
Peru: Payta, May 30, present.

THE ATLANTIC CITY SESSION

LARGEST ATTENDANCE ON RECORD.

Atlantic City for a Second Time Demonstrates Its Qualifications as Convention City.

The fifty-fifth annual session of the American Medical Association at Atlantic City has made medical history and has been in many respects the most notable convention ever held. The reports show that up to Tuesday afternoon 2,240 members had registered, a registration already exceeding by 221 the highest attendance ever noted, namely, that of 2,019 at Atlantic City in 1900. Reports received by telegraph just before going to press inform us that the registration up to Wednesday afternoon was 2,715. For the first two days of the New Orleans session the registration was 1,771, or 469 less than that for Monday and Tuesday of this session. The total attendance for the last five years has been: 2,019 at Atlantic City in 1900, 1,806 at St. Paul in 1901, 1,425 at Saratoga in 1902, 1,993 at New Orleans in 1903, and 2,715 at Atlantic City up to Wednesday at 4 p. m.

ARRANGEMENTS EXCELLENT.

Committee's Work Well Done—Weather Fine and Cool.

Atlantic City has justified its reputation as a summer resort, and the members, after suffering from the heat and moisture en route and in Philadelphia, were revived and rejoiced by the cool ocean breezes. The Committee of Arrangements is everywhere commended for the excellence and thoroughness of its preparations and for the earnest work of its members.

DELEGATES MEET.

House of Delegates Hold Two Sessions Monday—Hear Reports of Officers and Committees.

The House of Delegates met Monday morning and afternoon and transacted much important business, a detailed report of which appears in this issue. The work went smoothly. A definite campaign for national incorporation was planned.

REVISED CONSTITUTION ADOPTED.

The Committee on Constitution and By-Laws, appointed in May, 1903, at New Orleans, made its report, which was adopted with only slight modifications, thereby adopting the revised Constitution and By-Laws.

OPENING MEETING.

The meeting was called to order by President Billings. Rev. William Aikman, Atlantic City, opened the meeting with prayer.

Welcome.

Addresses of welcome were delivered on behalf of the citizens of Atlantic City by Mayor Franklin P. Strong and on behalf of the local profession by Dr. Theodore N. Reed. The Governor of New Jersey was unavoidably absent. The first vice-president, Dr. G. C. Savage, Nashville, Tenn., made a graceful response to the addresses of welcome. Dr. B. C. Pennington, Atlantic City, then presented the report of the Committee of Arrangements.

The Walter Reed Memorial.

The President introduced Dr. William W. Keen, Philadelphia, who reported the work done by the committee on the Major Walter Reed monument. Drs. William H. Welch, Baltimore, and Theodore Diller, Pittsburg, paid warm and eloquent tributes to Major Reed, and Dr. Keen presided over the subscription for the memorial fund. Great enthusiasm prevailed, and about eight thousand dollars was subscribed.

Induction of President-Elect.

Dr. Frank Billings, Chicago, the retiring President, then introduced the President-elect, Dr. John H. Musser, Philadelphia, who delivered the Address of the President, which appears on page 1533 of this issue.

GENERAL MEETING.

Oration on Medicine.

The general meeting was held in the First Presbyterian Church at 7:30 Tuesday evening. Dr. George Dock of the University of Michigan, Ann Arbor, delivered the annual Oration on Medicine, taking for his subject, "Prognosis; Its Theory and Practice." It will be found on page 1539 of this issue.

Symposium on Research Institutions.

The inauguration of the new feature of symposia at general meetings was agreed to be of great value, and the symposium on "Institutions Doing Research Work for the Science of Medicine," which included reports from the Carnegie Institution, by Dr. John S. Billings, New York City; the Rockefeller Institute, by Dr. L. Emmett Holt, New York City; the Memorial Institute for Infectious Diseases, by Dr. Frank Billings, Chicago; the Harvard Research Work, by Dr. Harold C. Ernst, Boston, and the William Pepper Laboratory of Clinical Medicine, by Dr. Alfred Stengel, Philadelphia, was very well received.

SECTION MEETINGS.

Sections Well Attended and Running Smoothly.

The Sections began their work Tuesday afternoon. The largest attendance was at the sections on Practice of Medicine, Surgery and Obstetrics.

Section on Surgery and Anatomy.

Professor Hoffa of Vienna was introduced and read a paper which was received with interest.

Section on Ophthalmology

The work of this Section was unusually well illustrated and exceedingly instructive. The address of the chairman, Dr. Robert L. Randolph, Baltimore, "Thoughts Suggested by a Study of the Eye Injuries of Independence Day," was interesting, valuable and timely. Dr. H. V. Würdemann, Milwaukee, gave a demonstration of "Tumors of the Orbit" which showed deep study. He also gave a new classification of these tumors in accordance with the demands of modern pathology.

Section on Stomatology.

This Section opened with a symposium on Dental Education, participated in by the chairman, Dr. George F. Eames, Boston, who, in his address, discussed "The Value of Symmetry in the Development of Professional Character and Education"; Dr. Charles Chittenden, Madison, Wis., who considered "The Evolution of Stan-

dards in Dental Education"; Dr. A. E. Baldwin, Chicago, who reviewed "The Phases of Dental Education," and Dr. John S. Marshall, U. S. Army, San Francisco, who gave "A Retrogressive and Prospective View of Dental Education." The papers evoked vigorous and thoughtful discussion, and will all appear in THE JOURNAL of June 18.

Section on Nervous and Mental Diseases.

This Section was saddened by the death of its chairman, Dr. F. Savary Pearce of Philadelphia, which occurred May 27.

Section on Cutaneous Medicine and Surgery.

The first day's work of this Section included the address of the President, Dr. Henry G. Anthony, Chicago, on "The Developmental Defects of the Skin and Their Developmental Growths," which will appear in THE JOURNAL of June 18; and papers by Dr. R. A. McDonnell, New Haven, on "Falling of the Hair"; by Dr. John A. Fordyce, New York City, on "Report of a Case of Paget's Disease of the Gluteal Region"; by Dr. Louis E. Schmidt, Chicago, on "Reports of Several Interesting Dermatologic Cases"; by Dr. William A. Pusey, Chicago, on "Radium and Its Therapeutic Possibilities"; by Dr. M. L. Heidingsfeld, Cincinnati, on "Linear Nevi"; a demonstration by Dr. John V. Shoemaker, Philadelphia, of "A Remarkable Case of Xanthoma," and a paper by Dr. Ludwig Weiss, New York City, on "Treatment of Hyperidrosis, Especially of Hyperidrosis Pedum, with Permanganate of Potash."

Section on Laryngology and Otology.

In this Section the paper by Dr. E. Fletcher Ingals, Chicago, on "Tonsillectomy by Forceps and Snare, Thorough, Painless and Safe," awakened much discussion.

Section on Materia Medica, Pharmacology and Therapeutics.

The address of the chairman, Dr. Oliver T. Osborne, was entitled "The Scourge of Nostrums and Irregular Practitioners." The Committee on Proprietary Medicines, consisting of Drs. Harry H. Moody, Mobile, Ala., and William J. Robinson, New York City, and Prof. Carl S. N. Hallberg, Chicago, presented its report, after which the papers were presented; by Dr. Harvey W. Wiley, Washington, D. C., on the "Federal Supervision of Drugs," in which he considered the supervision of drug importations; objects of examinations, to prevent fraud and to determine rate of duty; the doubtful questions submitted to the Secretary of Agriculture; the specific provision by Congress for the study of drug adulterations in the Bureau of Chemistry of the Department of Agriculture, and the study of foreign vegetable drugs with a view to introducing their cultivation in the United States; the organization of the drug laboratory in the Bureau of Chemistry; the three classes of drugs presented for study: 1. Drugs of the U. S. P.; 2. Proprietary remedies of standard composition recognized as legitimate remedies protected by trade mark or patent, and not official, and (3) so-called patent medicines defying definite description, mostly worthless, though often containing standard remedies, sold less on their merits than on the extent of their advertising; the indictable aspects of some of these advertisements; the co-operation of the Postoffice Department and action of the Postmaster General on the report of the Department of Agriculture; the exclusion of fraudulent preparations from the mails in this way; the desired co-operation of pharmaceutists and pharmaceutic societies to secure for the medical profession remedies of standard strength, unadulterated and of known character, and the needlessness of secret remedies containing unknown substances and of only assumed properties and value; Dr. Joseph P. Remington, Philadelphia, on "The Eighth Decennial Revision of the Pharmacopeia of the United States," and Dr. William J. Robinson, New York City, on "The Relation of the Proprietary Remedies. How May Substitution Be Avoided and the Desired Preparation Obtained Without Unduly Advertising the Manufacturers?" who said that the relation of the physician to proprietary medicines should be that of a skeptical but unbiased investigator. He should, first of all, know what he is prescribing, never ordering any preparation with the composition of which he is unfamiliar. Manufacturers should be made to state the ingredients of their preparations. The preparation should be occasionally analyzed by those competent to do so, to confirm or disprove the manufacturer's claims. If the ingredients of the preparation are known and the physician is satisfied with the therapeutic results, then he should make sure that he gets just what he ordered. This may best be accomplished by openly and frankly patronizing only pharmacies where substitution is known not to be practiced. Where the physician is not sure that he may trust his pharmacist he is perfectly justified in selecting the lesser of the two evils—prescribing in original packages.

The discussion on these papers was active and general.

THE DAILY BULLETIN.

An edition of 5,000 copies of the *American Medical Association Bulletin* was issued Tuesday, Wednesday, Thursday and Friday, giving lists of registrations and announcements for each day.

OTHER ATLANTIC CITY MEETINGS.

American Association of Life Insurance Examining Surgeons.

At its annual meeting, June 6, the following officers were elected: President, Dr. Denslow Lewis, Chicago; vice-presidents, Drs. Charles H. Harbaugh, Philadelphia; Frank B. Cross, Cincinnati; Henry W. Dewey, Tacoma, Wash., and Henry W. Cook, Richmond, Va., and secretary and treasurer, Dr. W. H. Birchmore, New York City.

American Medical Editors' Association.

At the meeting June 7 the following officers were elected: Dr. Harold N. Moyer, Chicago, president; Drs. James Evelyn Pilcher, Carlisle, Pa., and Otho F. Ball, St. Louis, vice-presidents, and Dr. Joseph McDonald, Jr., New York City, secretary.

American Academy of Medicine.

The following officers were elected June 6: President, Dr. Winfield Scott Hall, Chicago; vice-presidents, Drs. H. Bert Ellis, Los Angeles; Richard A. Reeve, Toronto, Ont.; Lewis S. McMurtry, Louisville, and Maurice H. Richardson, Boston; secretary, Dr. Charles McIntire, Easton, Pa.; treasurer, Dr. Edgar M. Green, Easton, Pa., and assistant secretary, Dr. Alexander M. Craig, Columbia, Pa. Sir Patrick Manson was elected an honorary member.

Entertainments.

The entertainment provided included Section smokers and vaudeville, receptions to visiting ladies by the committee and by Mrs. John H. Musser, a yachting trip for the ladies, and musicales on Young's and the Steel Pier every evening.

AMERICAN MEDICAL ASSOCIATION.

Proceedings of the Fifty-fifth Annual Session, held at Atlantic City, N. J., June 7-10, 1904.

OFFICIAL MINUTES—HOUSE OF DELEGATES.

First Meeting—Monday, June 6.

The House convened in the High School Building, Atlantic City, New Jersey, and was called to order at 10:30 a. m. by the President, Dr. Frank Billings of Chicago.

Report of Committee on Credentials and Registration.

Dr. Simmons presented the report of the Committee on Credentials and Registration.

On motion of Dr. H. O. Walker of Michigan the report was adopted.

Address of the President to the House of Delegates.

President Billings then delivered the following:

The privilege of presiding over this House of Delegates affords me keen pleasure. The sessions of this body at New Orleans were remarkable for the amount of business which was brought before it and for the facility with which it was transacted. The entire proceedings were characterized by a uniform feeling of cordiality between the members of the House, which made the work of the chairman comparatively easy.

Many of the delegates of a year ago are here. I feel, therefore, that I am in the hands of friends. I know your strength; you appreciate my limitations. I anticipate, therefore, that this—my last day as your presiding officer—will be a lasting and pleasurable era in my memory.

During the last year, as the legal president I have transacted the necessary business of the Association. There has been no especial subject acted on which needs to be mentioned especially here.

The greater part of the work of the Association accomplished during the year you will hear from through the Board of Trustees, the Secretary, the Editor and through the various committees which will report to you during this session.

By a mutual arrangement with Dr. J. H. Musser, the supervision of the business preparatory to the meeting at Atlantic City was left to him. This was done for the reason chiefly that the president-elect resided so near Atlantic City that he could easily keep in touch with the chairman of the Committee of Arrangements.

I have appointed the various necessary committees which require the legal sanction of the president. In other instances I have requested Dr. Musser to appoint the committees and delegates to form societies, etc., who would serve naturally during his term of office.

This arrangement has resulted in no embarrassment whatever, and I have to thank the president-elect for the relief he has afforded me by assuming much of the portion of responsibility in the preparations for the meeting here.

While it is necessary that the legal president should appoint the various committees which serve during the interval between the meetings, and especially the Committee of Arrangements at the next place of meeting, it would seem wise to me if the understanding should be established that the president-elect each year would assume the responsibility of advising and controlling the Committee of Arrangements with of course the aid of the Secretary of the Association. By this means the president-elect would come in touch with people who have to do with the arrangements for the meeting over which he would preside, and he would be better fitted, in a measure, to assume his duties of President than if he had nothing whatever to do with the arrangement of the meeting until he should be inducted into office.

It must be evident to each one of you who was present at the meeting at New Orleans that an enormous work was done by the House of Delegates, and, as I have stated before, done with facility and dispatch.

It is a question if this business was not done with too precipitate an action in some instances and one must feel that perhaps we need some word of caution. It is true that last year each new resolution was referred without debate to the business committee from whom we had a report before the subject was discussed and passed on. This was a measure of caution, but inasmuch as all of the business was poured into the business committee, its members were overworked. No word of criticism of any act of that committee, of which I am aware, has been made and the committee did its work as well as could an equal number of any other men. But there can be no question that such an amount of work demanded of a few men for four days in succession would only be burdensome to them, but would probably render them less able to judiciously weigh the business of the association than it deserves. It seems, therefore, to me, that we should at once consider some method by which all matters which come before us may be acted on with greater deliberation than the method adopted at Saratoga and at New Orleans, with the business committee, affords. This can be done by the creation of several committees to act in the place of the one business committee.

This matter has been discussed by your committee on revision of the constitution, and it has been my fortune to be able to confer with the members of that committee. From my conference with that committee and with other members of the association, I desire to present to you a plan which we may at once adopt, if it meets with your approval, and begin our deliberations with reference of all of our business to the several committees instead of as formerly, to the old business committee. These committees I would call "reference committees," and the number may be increased or modified in name from year to year as the house may elect.

To the appropriate committee should be referred the resolutions, measures and propositions which are presented to you before final action should be taken, unless you should decide unanimously to act otherwise. Each of these committees should, as soon as possible after the adjournment of each session of the House, or during the session if necessary, take up and consider the business which may have been referred to it. The committee should be able to report on the business referred to it at the next session or when called on for a report by you. Three members of a committee should constitute a quorum.

I would suggest the following committees:

1. A Committee on Sections and Section Work, to which shall be referred all business relating to the sections.

2. A Committee on Rules and Order of Business, to which shall be referred all matters regarding rules governing the action, methods of procedure and order of business of the House of Delegates.

3. A Committee on Medical Education, to which shall be referred all matters relating to medical colleges and medical education. The members of the Medical Council shall be members ex-officio of this committee.

4. A Committee on Legislation and Political Action, to which shall be referred all matters relating to State and National Legislation, memorials to legislatures, to the United States Congress, to the President of the United States, etc. The members of the National Committee on Medical Legislation shall be members ex-officio of this committee.

5. A Committee on Hygiene and Public Health, to which shall be referred all matters relating to hygiene, public health, etc.

6. A Committee on Amendments to the Constitution and By-Laws, to which shall be referred all business relating to the subject.

7. A Committee on Reports of Officers, to which shall be referred the President's address and the Secretary's and Trustee's reports, and

8. A Committee on Miscellaneous Business, to which shall be referred all business not otherwise disposed of.

I am sure that with this arrangement the business brought before us will be conducted with much more satisfactory results than if we continue to have but one committee. It will afford work for many members of the House who are on these committees and no member will be overworked as have been the members of the Business Committee during the last two years.

I have deliberated over this proposition, and if the suggestion meets with your approval, and the plan is adopted, I report the membership of these committees as follows:

Committee on Medical Education.—Chairman, Victor C. Vaughn; George W. Webster, George M. Kober, Joseph D. Bryant, Charles M. Ellis.

Sections and Section Work.—Chairman, A. P. Ohlmacher; Henry E. Tuley, G. W. Guthrie, Casey A. Wood, A. E. Baldwin.

Rules and Order of Business.—Chairman, Charles A. L. Reed; W. T. Sarles, Le Roy Long, S. Jepson, John Champlin.

Medical Legislation.—Chairman, J. N. McCormack; W. T. Bishop, J. Y. Porter, W. B. Dorsett, J. N. Hurty.

Hygiene and Public Health.—Chairman, J. N. Hurty; Henry B. Holton, S. T. Earle, Phillip Mills Jones, E. S. Patterson.

Reports of Officers.—Chairman, W. N. Wishard; D. E. Nelson, I. J. Prouty, Seth C. Gordon, S. C. Baldwin.

Constitution and By-Laws.—Chairman, M. L. Harris; A. N. Vance, D. S. Fairchild, W. A. Jayne, W. L. Wills.

Miscellaneous Business.—Chairman, E. W. Walker; A. R. Craig, E. E. Dorr, A. D. Price, R. C. Moore.
Credentials.—Chairman, George H. Simmons; F. W. McRae, Samuel Bailey, Harold N. Moyer, R. P. M. Ames.

On motion of Dr. Walker of Indiana that part of the President's address about referring matters to reference committees was adopted.

On motion of Dr. Baldwin, Illinois, the recommendation of the President in regard to the President-elect having control of the scientific work and its preparation for the next meeting was concurred in.

Report of the Secretary.

The Secretary read his annual report as follows:

To the Members of the House of Delegates of the American Medical Association:

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

The membership on the date of my last report, May, 1903, was 13,545. During the year there have been added 2,413, and 919 have been dropped: 188 on account of death, 111 not eligible, 278 for non-payment of dues, 315 resigned, many of these on account of old age, and 27 were not found, leaving a net gain of 1,494. This makes the total membership on May 1, 1904, 15,039. Of the 2,413 names added to our membership list, 411 were new members, and 2,002 were originally subscribers to THE JOURNAL, and finally transferred to the membership list.

MEMBERSHIP IN STATE ASSOCIATIONS.

The number of members of the various state associations, except Nevada, Oregon and Wyoming, have been secured from the secretaries. Omitting these three states, the total membership is 44,012. We can estimate the three states not given as having a membership of 350, making the grand total 44,362. I give below the name of each state, with the number of members:

Alabama, 1,295; Arizona, 95; Arkansas, 711; California, 1,505; Colorado, 518; Connecticut, 605; Delaware, 134; District of Columbia, 447; Florida, 236; Georgia, 650; Idaho, 75; Illinois, 3,931; Indian Territory, 168; Indiana, 1,947; Iowa, 1,511; Kansas, 562; Kentucky, 1,361; Louisiana, 819; Maine, 461; Maryland, 715; Massachusetts, 2,681; Michigan, 1,672; Minnesota, 863; Mississippi, 606; Missouri, 1,400; Montana, 60; Nebraska, 658; New Hampshire, 350; New Jersey, 1,122; New Mexico, 63; New York, 1,704; North Carolina, 800; North Dakota, 115; Ohio, 2,451; Oklahoma, 163; Pennsylvania, 3,799; Rhode Island, 274; South Carolina, 207; South Dakota, 160; Tennessee, 1,004; Texas, 2,321; Utah, 89; Vermont, 403; Virginia, 1,096; Washington, 420; West Virginia, 600; Wisconsin, 1,185. Total, 44,012.

PHYSICIANS IN THE DEPARTMENT OF THE INTERIOR.

At the last session the Secretary was instructed to correspond with the Department of the Interior and to advise the House of Delegates at the next annual session in regard to according this service specific recognition. The correspondence has been with the Hon. Thomas Ryan, First Assistant Secretary, Department of the Interior, and he has kindly supplied us with a list of the names of the physicians connected with the various branches of the Department.

The number of physicians connected directly and indirectly with the Department of the Interior is as follows:

Board of Pension Appeals, 5; Bureau of Pensions, 86; Indian Agencies, 73; Indian Schools, 52; Government Hospital for the Insane, 13, and Freedmen's Hospital, 3; total 232.

Of these 107 reside in Washington, and consequently can obtain membership in the Medical Association of the District of Columbia. Those connected with the Indian Agencies and with the Indian Schools (125) are the only ones that may have difficulty in obtaining membership in an affiliated society. In glancing over the list containing these names, I find that probably three-fourths are located where membership in an affiliated society would be easily obtainable. Some of the physicians are sectarians and probably would not be considered eligible. Nevertheless, the existing conditions are such that there are quite a number, probably between 25 and 50, who could not without great inconvenience obtain membership in an affiliated society, and consequently, under present arrangements, are debarred from membership in the American Medical Association.

Places of Meeting, Presidents, Vice-Presidents and Orators of the American Medical Association for the Past Fifteen Years.

Year.	President.	1st Vice-President.	2d Vice-President.	3d Vice-President.	4th Vice-President.	ORATIONS.		
						Medicine.	Surgery.	State Medicine.
Nashville, 1890.	E. M. Moore, New York.	J. W. Jackson, Missouri.	H. H. Kimball, Minnesota.	J. H. Warren, Massachusetts.	T. B. Evans, Maryland.	N. S. Davis, Illinois.	H. McGuire, Virginia.	A. L. Carroll, New York.
Washington, 1891.	W. T. Briggs, Tennessee.	C. A. Lindsley, Connecticut.	R. C. Moore, Nebraska.	C. H. Wyman, Michigan.	L. P. Gibson, Arkansas.	E. L. Shurly, Michigan.	J. M. Mathews, Kentucky.	W. L. Schenck, Kansas.
Detroit, 1892.	H. O. Marcy, Massachusetts.	Willis P. King, Missouri.	Henry Palmer, Wisconsin.	W. E. B. Davis, Alabama.	W. E. Taylor, California.	J. S. Cain, Tennessee.	J. B. Hamilton, Dist. Col.	C. A. Lindsley, Connecticut.
Milwaukee, 1893.	H. McGuire, Virginia.	H. O. Walker, Michigan.	Hawkins Brown, Kentucky.	H. Janes, Vermont.	Jesse Hawes, Colorado.	H. A. Hare, Pennsylvania.	H. H. Mudd, Missouri.	Walter Wyman, Dist. Col.
San Francisco, 1894.	Jas. F. Hibberd, Indiana.	J. A. Wyeth, New York.	Isaac N. Love, Missouri.	T. Murrell, Arkansas.	U. O. B. Wingate, Wisconsin.	C. H. Hughes, Missouri.	E. LaPlace, Pennsylvania.	Geo. H. Rohé, Maryland.
Baltimore, 1895.	Donald M'cLean Michigan.	Starling Loving, Ohio.	Wm. Watson, Iowa.	W. B. Rogers, Tennessee.	F. S. Bascom, Utah.	Wm. E. Quine, Illinois.	C. A. Wheaton, Minnesota.	H. D. Holton, Vermont.
Atlanta, 1896.	R. B. Cole, California.	J. J. Chisolm, Maryland.	J. C. LeGrand, Alabama.	A. P. Clarke, Massachusetts.	T. P. Satterwhite Kentucky.	William Osler, Maryland.	Nicholas Senn, Illinois.	Geo. H. Rohé, Maryland.
Philadelphia 1897.	Nicholas Senn, Illinois.	G. M. Sternberg, Dist. Col.	Edm. Souchon, Louisiana.	J. D. Thomas, Pennsylvania.	W. F. Westmoreland, Georgia.	Austin Flint, New York.	W. W. Keen, Pennsylvania.	J. B. Hamilton, Illinois.
Denver, 1898.	G. M. Sternberg, Dist. Col.	J. M. Mathews, Kentucky.	J. L. Thompson, Indiana.	F. H. Wiggin, New York.	T. J. Happel, Tennessee.	J. H. Musser, Pennsylvania.	J. B. Murphy, Illinois.	
Columbus, 1899.	J. M. Mathews, Kentucky.	W. W. Keen, Pennsylvania.	J. W. Graham, Colorado.	H. A. West, Texas.	J. E. Minney, Kansas.	J. C. Wilson, Pennsylvania.	F. W. McRae, Georgia.	D. R. Brower, Illinois.
Atlantic City, 1900.	W. W. Keen, Pennsylvania.	C. A. Wheaton, Minnesota.	E. D. Ferguson, New York.	J. M. Allen, Missouri.	W. D. Middleton, Iowa.	J. A. Witherspo'n Tennessee.	W. L. Rodman, Pennsylvania.	V. C. Vaughan, Michigan.
St. Paul, 1901.	C. A. L. Reed, Ohio.	A. W. Calhoun, Georgia.	A. A. Woodhull, Colorado.	Philip Marvel, New Jersey.	Wm. E. Quine, Illinois.	N. S. Davis, Jr., Illinois.	J. A. Wyeth, New York.	Geo. M. Kober, Dist. Col.
Saratoga Sp'gs, 1902.	John A. Wyeth, New York.	Alonzo Garcelon, Maine.	A. J. Stone, Minnesota.	A. F. Jonas, Nebraska.	Jas. A. Dibrell, Arkansas.	Frank Billings, Illinois.	H. M. Sherman, California.	J. M. Emmert, Iowa.
New Orleans, 1903.	Frank Billings, Illinois.	J. A. Witherspo'n Tennessee.	G. F. Comstock, New York.	C. R. Holmes, Ohio.	Jas. H. Dunn, Minnesota.	J. M. Anders, Pennsylvania.	A. F. Jonas, Nebraska.	Wm. H. Welch, Maryland.
Atlantic City, 1904.	J. H. Musser, Pennsylvania.	G. C. Savage, Tennessee.	Isadore Dyer, Louisiana.	C. Lester Hall, Missouri.	G. F. Jenkins. Iowa.	George Dock, Michigan.	W. J. Mayo, Minnesota.	H. M. Biggs, New York.

I am accompanying my report with a table which gives the names of the presidents, vice-presidents and orators for the past fifteen years for your information.

Respectfully submitted, GEORGE H. SIMMONS, Secretary.

Announcement of Committees.

The President then announced the following committees in accordance with the motion of Dr. Walker.

Committee on Medical Education.—Chairman, Victor C. Vaughn; George W. Webster, George M. Kober, Joseph D. Bryant, Charles M. Ellis.

Sections and Section Work.—Chairman, A. P. Ohlmacher; Henry E. Tuley, G. W. Guthrie, Casey A. Wood, A. E. Baldwin.

Rules and Order of Business.—Chairman, Charles A. L. Reed; W. T. Sarles, Le Roy Long, S. Jepson, John Champlin.

Medical Legislation.—Chairman, J. N. McCormack; W. T. Bishop, J. Y. Porter, W. B. Dorsett, J. N. Hurty.

Hygiene and Public Health.—Chairman, J. N. Hurty; Henry B. Holton, S. T. Earle, Phillip Mills Jones, E. S. Patterson.

Reports of Officers.—Chairman, W. N. Wishard; D. E. Nelson, I. J. Prouty, Seth C. Gordon, S. C. Baldwin.

Constitution and By-Laws.—Chairman, M. L. Harris; A. N. Vance, D. S. Fairchild, W. A. Jayne, W. L. Wills.

Miscellaneous Business.—Chairman, E. W. Walker; A. R. Craig, E. E. Dorr, A. D. Price, R. C. Moore.

Credentials.—Chairman, George H. Simmons; F. W. McRae, Samuel Bailey, Harold M. Moyer, R. P. M. Ames.

On motion, the reports of the President and Secretary were referred to the Committee on Reports of Officers.

Report of Business Committee.

The President called for the report of the Business Committeee.

Dr. Walker, Indiana, Chairman, said the committee had nothing to report at this time.

Report of Committee on Rush Monument.

Dr. Holton, Vermont, read his report as Treasurer of the Rush Monument, which was referred to the Board of Trustees.

Report of Committee on Medical Education.

Dr. Arthur D. Bevan, Illinois, chairman, presented the report of the Committee on Medical Education, which was referred to the Committee on Medical Education.

REPORT OF COMMITTEE ON MEDICAL EDUCATION.

Mr. President and Members of the House of Delegates: Your Committee on Education, consisting of Floyd W. McRea, Atlanta, Ga.; Rudolph Matas, New Orleans, La.; R. A. Marmion, United States Navy, Washington, D. C.; C. A. Daugherty, South Bend, Ind., and Arthur Dean Bevan, Chicago, Ill., chairman, respectfully submits the following report:

1. The American Medical Association was founded for the special purpose of obtaining a uniform and elevated standard of requirements for the degree of M.D.

2. The American Medical Association has so far accomplished little toward this end. The existing standards are not satisfactory as compared to those of the other great powers.

3. Our form of government makes it impossible, or improbable at least, to obtain national governmental control of medical education.

4. In absence of national governmental control efforts to make uniform and elevated the standard of medical education can be made most effective through the agency of the organized medical profession of the entire country, and such a body we now have in the reorganized American Medical Association.

5. The problem of using to the best purpose the weight and influence of the American Medical Association toward elevating medical education is a very large one and one which must be carefully worked out. This can best be done by a permanent committee or council specially created for this purpose.

6. We recommend the creation of such a council by the following addition to the By-laws, to be Chapter VI, Section 8:

CHAPTER VI.

SECTION 8.—The Council of Education shall consist of five members, to be appointed by the president and confirmed by the House of Delegates.

Immediately after the adoption of this by-law, one member shall be appointed to serve for one year, one for two years, one for three years, one for four years and one for five years. Thereafter one member shall be appointed each year to serve for five years.

The council shall organize, elect a chairman and secretary and shall adopt such regulations for the government of its actions as it deems expedient. It shall expend money or contract financial obligations only as shall be authorized in writing by the Board of Trustees.

The functions of the Council of Medical Education shall be:

1. To make an annual report to the House of Delegates on the existing conditions of medical education in the United States.

2. To make suggestions as to the means and methods by which the American Medical Association may best influence favorably medical education.

3. To act as the agent of the American Medical Association (under instructions from the House of Delegates) in its efforts to elevate medical education.

Report of Committee on Award of Association Medal.

Dr. L. S. McMurtry, Kentucky, read the report of the Committee on Award of the Association Medal, which was referred to the Committee on Miscellaneous Business.

REPORT OF THE COMMITTEE ON PRIZE ESSAY.

To the President and House of Delegates of the American Medical Association: Mr. President, the Committee on Prize Essay would respectfully report that soon after the adjournment of the Association last year, the following circular announcement was prepared and published in THE JOURNAL, and in all the other leading weekly medical journals of the United States, also in many monthly medical journals. This wide publicity was obtained through the courtesy of the medical press at the instance of the editor of THE JOURNAL of the American Medical Association.

The Prize Essay of the American Medical Association, a gold medal valued at $100, is offered annually by the American Medical Association for the best essay on any subject relating to medicine or surgery. The successful contestants for the prize may choose to receive (1) the gold medal, (2) a bronze replica of the medal and the remainder of the appropriation (about $90) in money, or (3) the entire amount ($100) in money. Since the Association annually sets apart the sum of $500 for original research, this prize is offered to stimulate the production of a superior practical essay based either on experimental studies or clinical investigations, or both. The committee will give preference to essays having the greatest brevity consistent with thorough consideration of the subject, and recommends that essays shall not exceed 500 words. The committee, while not restricting the choice of subjects, recommends as an important subject for consideration "The Therapeutic Value of the Digestive Ferments." Competing essays must be typewritten and must bear no mark revealing their authorship; but instead of the name of the author there must appear on each essay a motto, and accompanying each essay must be sent a sealed envelope containing the name of the author and bearing on its outer surface the motto of identification. No envelope will be opened by the committee until a decision has been reached as to the most deserving essay. The other essays will be returned to their respective authors. The committee reserves the right to reject all essays if none are found worthy of the Association medal. Competing essays must be in the hands of the chairman of the committee not later than April 1, 1904. Committee:: Lewis S. McMurtry of Louisville, Ky., chairman; Burnside Foster of St. Paul; M. H. Fussell of Philadelphia.

In response to this circular only one essay was received by the committee. The essay was submitted to the members of the committee for examination, and it is not deemed of sufficient merit to receive the Association's prize. Your committee has endeavored to avoid both extremes—that of fixing too high a standard of requirements on the one hand, requiring, on the other hand, sufficient scientific and practical value for the prize essay to be justly considered a positive addition to existing knowledge. With this standard in view your committee has decided that the essay submitted, while meritorious in many particulars, falls short of the standard fixed by the committee.

The chairman of your committee served as a member of the committee for several years with Dr. Hobart A. Hare of Philadelphia as chairman. During Dr. Hare's administration no essay was received by the committee so far as I am aware. Dr. Hare retired from the committee, we think, much discouraged as to the practicability of stimulating such research as was contemplated in founding the prize for an essay. As stated in the circular announcement just read, the Association annually sets apart the sum of $500 for original research, the Senn medal is annually offered for competition, so that the prize for an essay as contemplated in this instance has not stimulated the special study and investigation originally contemplated by the Association.

In the preparation of the announcement this year, which is included in this report, a definite subject of general practical interest was suggested as appropriate for such an essay in order that the object of the prize might be better understood, but this, too, has failed to attract competition.

In view of these facts your committee would recommend that the Association prize for an essay be abolished and the committee discharged.

All of which is respectfully submitted.

(Signed) L. S. MCMURTRY.
BURNSIDE FOSTER.
M. H. FUSSELL.

Report of Committee on Award of Senn Medal.

Dr. M. L. Harris, Illinois, reported for the chairman of the Committee on Award of the Senn Medal that there had been no paper submitted to the Committee during the past year. (Referred to the Committee on Miscellaneous Business.)

Report of Committee on Transportation and Place of Session.

Dr. M. L. Harris of Illinois, chairman of the Committee on Transportation and Place of Session, reported that as the committee did not meet until the assembling of the General Session, he simply wished to report progress. The committee had done considerable work, but had not had time to complete it, and asked that further time be granted the committee.

On motion, the request was granted.

Journal Clearing House Commission.

Dr. H. O. Walker of Michigan presented a preamble and resolutions which were unanimously adopted by the Michigan State Medical Society, May 25, 1904.

WHEREAS, An exact knowledge of the composition and properties of substances used in the management of disease is essential to a physician's best success:

WHEREAS, Commercial push, by advertisement and drummers, persuades many physicians (often the very elect), to use and commend drugs, mineral waters, artificial foods, etc., etc., of unknown composition and effects:

WHEREAS, As it is impossible for the individual physician to verify the statements of sales agents, to separate fact from fancy,

he often uses substances quite unlike those indicated, to the discredit of himself and his art:

WHEREAS, The American Medical Association was organized to promote the exact knowledge and intelligent practice of its members:

Resolved, That the Board of Trustees, American Medical Association, is hereby requested to provide for the analysis of medicinal substances of unknown composition and undetermined effects, and to promptly publish the results in the Association JOURNAL:

Resolved, That the Board of Trustees be requested to appoint a "Journal Clearing House Commission," three in number, to serve without salary, with authority to have analyses made in reliable laboratories, by experts of recognized ability, or to equip a suitable laboratory and employ one or more competent experts, at a yearly expense not to exceed five thousand dollars.

This preamble and resolutions were unanimously adopted by the Michigan State Medical Society at its meeting in Grand Rapids, May 25, 1904, and its delegates were instructed to present the same to the American Medical Association at Atlantic City, and urge their adoption.

Dr. Harold N. Moyer, Illinois, moved that the resolutions be referred, first, to the Reference Committee on Medical Legislation. Seconded.

Dr. Harris, New York, moved as an amendment that the resolutions be referred to the Committee on the Establishment of a National Bureau of Medicines and Foods, and that action be postponed until after the report of that Committee on allied subjects. Seconded.

Dr. Moyer accepted the amendment, and the motion as amended was carried.

On motion of Dr. Ellis, California, the Secretary was instructed to procure a blackboard and have the names of the various committees written thereon at the opening of the afternoon session.

Report of Committee on National Legislation.

Dr. Charles A. L. Reed, Ohio, chairman of the Committee on National Legislation, read the report of this committee, and on motion, the report was referred to the same committee.

Report of the Committee on Medical Legislation.

Your Committee on Medical Legislation begs leave to report that it has held three formal sessions, namely, one in New York City, June 7, 1903, one in Washington, D. C., Feb. 11, 1904, and the third at Atlantic City, N. J., June 6, 1904, and that pursuant to clause in Chapter VII, Article III of the By-laws, it held a conference with the representatives of the various state medical associations, such conference having been held at Washington, February 12. Concerning the various questions which have been under consideration, your committee deems it important to report specifically but briefly concerning the following:

ORGANIZATION OF NATIONAL AUXILIARY CONGRESSIONAL AND LEGISLATIVE COMMITTEE.

At the meeting of the committee held in New York City, already alluded to, it was unanimously resolved, by virtue and in pursuance of the authority granted to the committee to devise means for the better promotion of needed medical legislation, to arrange for the appointment of an official correspondent in practically each county of the United States, this corps of correspondents to be known and designated as the National Auxiliary Congressional and Legislative Committee. It was thought that nominations for this large committee could best be made by the presidents of the various state medical associations, and a request was therefore issued to these officers asking for the name of a committeeman for each county in their respective states. The responses to this request were very general, only two positive declinations having been received, namely, one from Alabama, based on the ground that the president had no authority from his state association to exercise such kind office, and a second, from Massachusetts, the president of which association declined to make nominations on the ground that to extend such a courtesy would imply, in his opinion, the existence of an affiliation between that body and the American Medical Association, which affiliation, in his opinion, did not exist. In one or two other states the absence of a local organization has been given as an excuse for non-compliance, with the statement, however, that the necessary steps would be taken as speedily as possible. Nominations sent in, however, from the various states gave the central committee a list of about 1,940 names. Commissions were, accordingly, issued to each of these nominees, with the request that he serve in and for the county in which he resided until his successor was appointed and qualified, with duties prescribed as follows:

It shall be the duty of each member of the National Auxiliary Congresional and Legislative Committee to bring all and only such matters of pending legislation as may be referred to him, either by the legislative committee of his respective state or territorial medical association, or by the Committee on Medical Legislation of the American Medical Association, to the attention of the medical profession and the people of his respective county, and by every honorable means, personal and political, individual and professional, private and public, direct and indirect, secure desired action thereon by his representatives in both branches, as the case may be, of the state legislature or of the congress of the United States. And it shall be his further duty promptly to report all such efforts on his part, first relative to state legislation to the chairman of the committee on legislation of his state medical association, and, secondly, relative to national legislation to the chairman of the Committee on Medical Legislation of the American Medical Association.

This extensive organization was practically completed by December, 1903, although there was no occasion to appeal to it until after the conference at Washington in February following.

NATIONAL LEGISLATIVE COUNCIL.

This conference, consisting of your committee and of one delegate from each affiliated state association and by representatives from the national medical services, was held in Washington, Feb. 11, 1904. A number of questions were brought to the attention of the meeting, among which were bills either maturing in the departments or actually pending before the congress as follows:

1. From the War Department: (*a*) An appropriation of $13,000.00 for book stacks at the Army Medical Museum and Library; (*b*) an appropriation for a general hospital for the army in the District of Columbia; (*c*) a bill to increase the efficiency of the Medical Department of the United States Army.

2. From the Navy Department: (*a*) A bill authorizing the establishment and organization of a corps of dentists in the U. S. Navy; (*b*) a bill for the establishment and organization of a nurse corps of trained women nurses in the U. S. Navy, and (*c*) an act to reorganize and increase the efficiency of the hospital corps of the navy of the United States, to define its duties and regulate its pay.

3. From the Agricultural Department: A bill for preventing the adulteration or misbranding of foods or drugs and for regulating traffic therein and for other purposes.

4. From the Treasury Department: A bill for an appropriation of $75,000.00 for the Hygienic Laboratory of the Public Health and Marine-Hospital Service, providing for a building and grounds.

In addition to the foregoing, cognizance was taken of (1) the then pending organization of the Panama Canal Commission, with the result that it was determined to make an effort to secure the appointment of a representative of the medical profession as a member of the commission itself, and (2) of the constitution of the general staff of the army, from which representation from the medical corps was then excluded.

The spirit of the conference was to give its own aid to invoke the influence of the profession only in behalf of such proposed legislation as seemed to have been the result of mature deliberation and to have arisen from the manifest exigencies of the various services. The position was taken that it would be much better for the profession to tender its influence in behalf of a comparatively few measures of unquestionable merit, rather than to support a large number of measures, the practicability of which could not be predetermined. In pursuance of the foregoing considerations the Legislative Council recommended the Committee on Medical Legislation to issue referenda on the following subjects:

REFERENDA.

Referendum No. 1.—This referendum, relating to the appointment of a medical representative on the Panama Canal Commission, was issued to the National Auxiliary Congressional and Legislative Committee, under date February 24, and requested each member of the committee to telegraph the president, urging such appointment and mentioning Col. W.

C. Gorgas, surgeon U. S. A., as a suitable person for the place, and to take such further action as might best be calculated to accomplish the object in view. The response to this referendum was spontaneous and enthusiastic. Your committee has been reliably informed that within 48 hours after it was issued more than 1,400 telegrams were received at the White House. Unfortunately, however, the law creating this commission prescribed that it should consist of seven members, four of whom should be engineers and one of whom should be a representative of the army and another of the navy, leaving the president absolute freedom to choose but a single member of the commission. The choice of this member had already been made, although your committee was not aware of the fact. It should be stated, furthermore, that your committee was in receipt of information which it considered reliable, to the effect that appointments on this commission would not be concluded until after March 1—a fact which accounts, in a certain measure, for the apparent delay in issuing the referendum. The result of this referendum is, however, considered salutary. In the first place it enabled your committee to demonstrate in the most conspicuous manner that the medical profession of the entire country is organized for legislative purposes; in the next place it emphasized the importance of sanitary administration, and has secured for those intrusted with these interests a degree of consideration and a status more satisfactory than would otherwise have been realized.

Referendum No. 2 was issued March 3, to promote the passage by the congress of bills relating to the medical service of the army as follows:

(A) "A bill to increase the efficiency of the Medical Department of the United States Army, and

(B) "An appropriation of $400,000 for a general hospital for the army in the District of Columbia."

The first of these measures, providing for an increase of the number of surgeons in the upper military grades and for the creation of a reserve medical corps, was rejected so far as these features are concerned by the general staff, but following representations by your committee was indorsed by Secretary Taft, and in that form went before congress.

Referendum No. 3 was issued March 10 to secure the united effort of the profession of the country in the final passage of a bill now pending in the United States Senate, entitled "A Bill for Preventing the Adulteration or Misbranding of Foods or Drugs and for Regulating Traffic Therein, and for Other Purposes," etc. Each auxiliary committeeman was requested to write to the chairman of the Committee on Manufactures, both of his United States Senators and to his representative, and, to secure the co-operation of his local profession, have resolutions adopted by his county societies, ask for editorial comment by local newspapers and send letters, copies of resolutions and newspaper clippings, expressive of public sentiment, to the chairman of the committee to be used by him in his championship of the bill in the senate.

Referendum No. 3 (supplementary) was issued because of the confusion which had arisen, growing out of the fact that, after the original referendum had been issued, the senate had substituted the text of its own bill for that which had been passed by the house. It was deemed by the committee that the senate bill was really the stronger of the two, the important difference being that it brought non-pharmaceutical remedies under the control of the government. The response to this referendum was very satisfactory. Senator Heyburn has in his possession a large number of letters and petitions which he has had issued in the *Congressional Record*, and an equally large number are being held until next session of the congress, when the pure food bill will come up for final hearing. Delay is considered advantageous to the friends of the bill, when we hope to counteract the influence of the opposition represented by the whisky trust and by the patent medicine trust.

MEDICAL REPRESENTATION IN THE GENERAL STAFF.

The question of securing a representation of the Medical Corps on the General staff of the Army, was taken up by a formal communication addressed to the secretary of war, under date March 1, 1904. The letter, it seems, however, was acknowledged by the assistant adjutant general March 12 and replied to by the chief of staff March 18. The latter communication transmitted the finding of the general staff, with the approval of the chief of staff, refusing the request which had been filed by your committee. The question was thereupon brought by your committee to the personal attention of Secretary Taft, with the result that an order was issued directing that a representative of the Medical Corps be detailed for service on the general staff. Your committee is thus able to report that one more invidious distinction which has long been maintained in the army against the Medical Corps, has been removed. This announcement is made with more pleasure in view of the cordial good spirit with which the change has been received by the other branches of the service.

THE WORK OF THE OFFICE.

It can be seen at a glance that the work entailed by this extensive organization and by the object that it attempts to accomplish, can not but be very laborious. As a matter of fact, more than 13,000 communications have been received, while nearly 30,000 have been issued from the office of your chairman. This has entailed a very considerable amount of printing, which, through the generous co-operation of the Board of Trustees, has been done in large part and will continue to be done in the office of THE JOURNAL. The clerical force necessary to carry on this correspondence, particularly during the congressional session, is an item of considerable expense, and if the work is to continue along the lines already projected, must be maintained. It is recommended, therefore, that necessary provision covering this item of expense and that involved for postage shall be made, either by specific appropriation or by general resolution, unless Chapter V, Section V. of the By-laws shall be construed to give the Board of Trustees proper discretionary power under such circumstances.

RECOMMENDATIONS.

(1) It is recommended that Article VII, Section III, of the by-laws be amended to read as follows:

(a) The Committee on Medical Legislation shall consist of three members appointed by the president, one for a term of one year, one for a term of two years, one for a term of three years, but whose successors shall each be appointed as vacancies occur for a term of three years, whose duty it shall be to represent before congress and elsewhere the wishes of this Association regarding any proposed legislation that in any respect bears on the promotion and preservation of the public health, or on the material or moral welfare of the medical profession.

(b) There shall be a National Legislative Council, which shall consist of the Committee on Medical Legislation, provided for in the preceding paragraph, and one representative from each state and territorial medical association and from each of the national medical services, such representatives to be nominated, respectively, by the presidents of the various state and territorial associations and by the chiefs of the respective national medical services, and appointed by the president of this Association. This council shall annually convene at the call of the Committee on Medical Legislation and shall consider questions of medical legislation as may be pending before the congress, or as may be referred to it by any state or territorial medical association, or by the chiefs of the national medical services, or that may be proposed by any of its members. Any action taken by the council shall be advisory in character and construed as a recommendation for the guidance of the Committee on Medical Legislation.

(c) There shall be a National Auxiliary Congressional Committee, which shall consist of one member of each county of the United States and one in each of the national medical services, appointment to such committee to be made by the Committee on Medical Legislation on nomination by the members of the National Legislative Council in conference with the councilors, or in the absence of the councilors, with the executive officers of the respective state associations. It shall be the duty of each member of the National Auxiliary Congressional Committee to bring all and only such matters of pending legislation as may be referred to him by the National Committee on Medical Legislation to the attention of the medical profession and the people of his respective county and by every honorable means, personal and political, individual, professional, private and public, direct and indirect, secure desired action thereon by his representatives in both branches of the congress of the United States. And it shall be his further duty promptly to report all such efforts on his part to the chairman of the National Committee on Medical Legislation.

(2) It is further recommended that the entire organization of the American Medical Association bring itself to bear in securing members of the medical profession to become candidates for congress. One of the most serious difficulties with which your committee has to labor has been the complete absence of all medical representation on the floor of the House

of Representatives, while there are but two physicians in the Senate. This matter is of such distinct importance to the welfare of the medical profession, and to the welfare of the community, as represented by and through the medical profession, that every physician is urged to use his utmost influence, personal and professional, direct and indirect, in securing (1) the candidacy and (2) the election of colleagues of his profession to congress.

In conclusion, your committee, not only on its own behalf, but on behalf of the National Legislative Council and the National Auxiliary Congressional Committee, begs leave to thank the executive officers of the Association, the editor of THE JOURNAL and the Board of Trustees for cordial and appreciative co-operation in furthering the important work which it has had in hand. Respectfully submitted.

WM. H. WELCH,
W. L. RODMAN,
CHARLES A. L. REED,
Committee.

Dr. W. H. Sanders, Alabama, rose to a question of personal privilege, stating that the chairman of the Committee on National Legislation had mentioned in his report that Alabama had declined to appoint an auxiliary member of the Legislative Committee. He desired to say that the constitution of the state of Alabama was very definite; that it prescribed the duties of the President very definitely, and that those duties were extra-constitutional. Therefore, he did not feel authorized to make such an appointment, not from any intention of not participating in whatever national work might properly come before the association of Alabama or this body, but taking the view that under the constitution under which he was acting he had no such authority and declined to make the appointment.

Dr. Reed stated that the remarks made by Dr. Sanders were in direct line with what occurred in the report of the committee. From personal experience the committee succeeded in getting appointed tentatively a member of the committee through other channels, and the influence of Alabama had a very effective bearing on matters of legislation.

On motion of Dr. McCormack, Kentucky, the report of the Committee on Constitution and By-Laws was made the first order of business after the reading of the minutes at the next session.

Report of Trustees Postponed.

On motion, the time for listening to the report of the Board of Trustees was fixed at approximately 3 p. m. to-morrow afternoon.

Report of Provisional Committee on the Establishment of a National Bureau of Medicines and Foods.

Dr. E. Eliot Harris, New York, chairman, read the report of the Committee on the Establishment of a National Bureau of Medicines and Foods (provisional committee).

Michigan Resolutions Referred.

Dr. Moyer, Illinois, renewed his previous motion that the resolutions offered by Dr. Walker of Michigan on the report of the Committee on the Establishment of a National Bureau of Medicines and Foods (provisional committee) be referred to the Reference Committee on National Legislation.

Seconded and carried.

Report of Committee on Reapportionment Postponed.

Dr. W. S. Foster, Pennsylvania, Chairman of the Committee on Reapportionment, speaking for the committee, asked the privilege of reporting on Thursday, at which time the committee would be able to make a full report.

On motion the request was granted and the time for making the report was fixed as the first order of business on Thursday.

Report of Committee on National Incorporation Postponed.

Dr. Bryant, speaking for the committee on National Incorporation, stated that the members of the Committee had not had an opportunity to meet, but were going to do so immediately after the adjournment of the meeting, and said the Committee would doubtless be prepared to report at the afternoon meeting.

Report of Committee on Organization.

Dr. McCormack, Kentucky, chairman, read the report of the Committee on Organization.

To the House of Delegates: The prompt and cheerful acceptance of your plan of organization by states and counties in every section of the country, and the uniformly gratifying reports of the results secured under its operation, make the account of our stewardship for the year a pleasant task.

A member of the committee has attended the annual meetings in a majority of the states, and in a number of them before and after their reorganization, and we are therefore in position to bear personal testimony to the progress which has been made.

Since the New Orleans meeting the standard constitution and by-laws, with such modifications as were necessary to adapt them to local conditions, have been adopted in North Carolina, Indiana, New Jersey, New York, Rhode Island, South Carolina, Maryland, Oklahoma and Delaware, in the order named. In addition, Minnesota, West Virginia and Kansas, which had partially reorganized in 1902, have also adopted the standard plan. As Alabama and Massachusetts have long had most of the important features of the Association plan, Pennsylvania, Virginia and Georgia are the only great states still operating under the old methods.

Michigan led the procession of states in this work last year, increasing the membership from 452 to about 2,100. Texas easily takes the banner this year, with an increase from 382 to 2,510, although several states have quadrupled their membership. What is probably still more significant as indicating the rapid growth of the movement, over 1,600 of the 2,830 counties in the United States are more or less completely organized.

While these results are almost phenomenal when compared with the past, they seem small in the light of what remains to be done before our organization is really complete. Few states except Alabama have over 50 or 60 per cent. of the eligible physicians even enrolled as members. After this preliminary work is completed, or while it is being done, and as a means to that end, good fellowship is being built up, the leaders of the profession in each county and state should join hands and put their heads together for such a utilization of all the forces at the command of a united profession for improving the condition of every physician and citizen of the jurisdiction.

This will cover every phase of professional work and interest, scientific, social, material and legislative, and, in the very nature of things, will never be completed. Instead, the assumption and proper discharge of these functions will constantly open up or develop new avenues of activity and usefulness. We are anxious that all this should be fully realized by you, and especially by the organizations you severally represent. The real test of our plan of organization will come in each state when the first outburst of enthusiasm has passed, and country societies, the foundation for everything, are likely to disappear as rapidly as they have been formed unless their usefulness to the rank and file of the profession can be demonstrated in a very broad way.

We earnestly commend these county societies to this Association, and to every official and agency at its command.

RECOMMENDATIONS AS TO TIME OF MEETING OF STATE ASSOCIATIONS.

To the House of Delegates:

GENTLEMEN:—The following instructions were given us at the New Orleans meeting:

Resolved, That the Committee on Organization be instructed to confer during the year with the governing authorities of the various state and territorial associations, and, if possible, to report to this House next year some general plan for holding the annual meetings of these bodies in the fall, or at least at a time which will least conflict with the attendance of members at the sessions of the Association.

In obedience to the foregoing, we beg leave to report that, after an interchange of views, so far as practicable, with representatives of the state associations in all sections of the country, it seems advisable to recommend that all state associations hold their annual meetings during the fall and early winter months, beginning with September in the extreme North, and ending probably with December in the extreme South, and that this body continue to hold its meeting in the spring.

The Committee is frank to admit that it entered on the consideration of this matter with the expectation of reaching a conclusion and of making a recommendation exactly the reverse of this. That is, we expected to advise that the meetings of this Association be held in the fall and that all state organizations meet in the spring. This suggestion met with opposition almost everywhere, particularly from members connected with medical schools. They conceded the importance of systematizing and harmonizing the dates, but represented that it required an average of not less than ten days to attend the meetings of this Association, and that in the fall this would come at a time when most of the schools were just getting under way, and absence from their work would be most inconvenient and hurtful. They said, on the other hand, that the state meetings were close at hand, lasted but three days at most, and could be attended even by school men with as little inconvenience in the fall as at any other season.

In thirty-five states the annual meetings are now held in the spring, most of them within the three or four weeks immediately preceding the meeting of the Association. As many of the best and busiest men can not well be away from home twice within so short an interval, they are forced to choose between the two, when they would like the privilege of attending both. Ten states now hold their meetings in the fall, and aside from the freedom from conflict with other meetings, the claim is made that the weather is more reliable, and that it suits the country physicians better, because the meetings come at a time when many of them need to go into the cities for their winter supplies.

It is also recommended that the dates of the meetings be arranged in accordance with some definite system. This year the meetings in Missouri, Iowa, Illinois, Ohio and Kentucky, neighboring states, all fell on the same day. If the meetings for a given section of the country, or for the entire country, could follow each other in some regular order, say one meeting early and one late in each week, as seems entirely practicable, it would be possible to add greatly to their interest by arranging for the attendance and a place on the program for the president, secretary, or one of the orators of this Association, for such of the state associations as desired it. The same privilege would also apply to fraternal delegates or distinguished physicians of other states, if invited to attend.

The Committee makes these recommendations only because it was directed to do so, and with a full appreciation of the delicacy of the position of this Association in regard to the matter. Even if approved by you, these recommendations are intended rather as a means of calling the attention of the state associations to the importance of such concert of action and agreement as will increase the interest and attendance at all the meetings and operate with least inconvenience to a majority of members.

The universal adoption of these recommendations would not in the least interfere with the plan of holding meetings of the new branch associations in the fall, as will be made clear in the report on that subject.

REPORT ON BRANCH ASSOCIATIONS.

To the House of Delegates:

Your Committee, to whom was assigned the duty of reporting on the advisability of dividing the country into branch associations, in accordance with the permissive provision contained in the plan of organization of this Association, and of suggesting a constitution and by-laws for such branches, and the states and territories which should be assigned to each, if such division was deemed advisable, begs leave to recommend that permission be given for the creation of seven branches, at the discretion of the governing authorities of the state associations composing them, so arranged as to cover the entire country.

Provisionally it is recommended that the branches be numbered and named, and that they shall contain or have assigned to them states and territories as follows:

1. NEW ENGLAND AND NORTH ATLANTIC BRANCH.—New York, New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire and Maine.

2. MIDDLE AND SOUTH ATLANTIC BRANCH.—Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, North Carolina and South Carolina.

3. SOUTHERN AND GULF BRANCH.—Georgia, Alabama, Mississippi, Louisiana, Arkansas, Tennessee and Porto Rico.

4. MISSISSIPPI VALLEY AND LAKE BRANCH.—Ohio, Indiana, Illinois, Kentucky, Missouri, Michigan and West Virginia.

5. NORTHWESTERN BRANCH.—Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Montana and Wyoming.

6. SOUTHWESTERN BRANCH.—Texas, Kansas, Oklahoma, Indian Territory, Colorado and New Mexico.

7. MOUNTAIN AND PACIFIC BRANCH.—California, Oregon, Washington, Idaho, Nevada, Arizona, Alaska, Hawaii and the Philippine Islands.

A form of constitution and by-laws is submitted herewith, under which, as provided in the system proposed in our original plan, the presidents of the respective state associations become the vice-presidents of the branch associations, and the presidents of these larger bodies in turn become the vice-presidents of this Association. It is also provided that membership in the branch associations shall be voluntary, as it is in this body, but that no one shall be eligible for membership in any such branches who is not a member in good standing of his own county and state associations.

As the branch associations are organized, it is recommended that they hold their meetings in the fall, and at the same time for that of the state association of the jurisdiction in which the meeting is held. For instance, if the meeting of the Mississippi Valley and Lake Branch was to be held in Kentucky in 1905, it is advised that the scientific program of the two bodies for that year be merged, the house of delegates of each, of course, meeting separately for all purposes. The same arrangement would apply in the other states from year to year until the meetings had gone around. The bulk of the attendance under such a plan would be made up of the members in the state in which the meeting was held, as will be the case under any plan, but the attendance of leading men from other states would always be sufficient to add greatly to the interest of the state meeting for that year, and year after year this advantage would be extended to each state embraced in the branch.

In making the assignments of the states, existing organizations, facilities for travel and natural affiliations were considered so far as known and possible, but it is probable that advantageous changes can be suggested by members of this house who are better informed as to these matters in their own sections than we could hope to be.

The Committee realizes that the questions embraced in this report are important and far-reaching, and that some states and sections may not be prepared for several years to avail themselves of such an arrangement as is here suggested. Other sections are ready with old and valuable organizations, anxious to weave themselves into and become a part of our uniform system, and some of them have already taken steps looking to this end. If the recommendations are approved, nothing hasty or ill-considered can result, as the whole matter in each branch is conservatively left to the governing bodies of the state associations composing them, and membership is made entirely voluntary and limited to those who are members of their respective county and state associations.

Respectfully submitted.

J. N. MCCORMACK,
G. H. SIMMONS,
P. MAXWELL FOSHAY,
Committee.

Report of Committee on Portraits of Ex-Presidents.

The Committee on Portraits of Ex-Presidents reported progress.

Report of Committee on Sections and Section Work.

Dr. L. S. McMurtry, Kentucky, presented the report of the Committee on Sections and Section Work.

REPORT OF THE COMMITTEE ON SECTIONS AND SECTION WORK.

Dr. L. S. McMurtry of Kentucky made a verbal report of this committee. He said:

As chairman I have no formally-written report, but it may be of interest to the House of Delegates to have a brief statement in regard to the work of the committee. At the meeting held in Saratoga in 1902 Dr. Osler of Baltimore and Dr. Vaughan of Michigan and myself were appointed on this committee, which we mapped out at that meeting. We found that the section work of the Association, the importance of which could not be exaggerated, was very much in need of reconstruction. The committee undertook to bring the section work up to the standard of special organizations in the country which were engaged in similar work, and among the first things the committee realized was the importance, in the selection of chairmen and secretaries of the sections, to get men who were familiar with the work, and especially to have the secretaries somewhat permanent. This in great part has been done.

Another feature that we found so essential to the success of this work was that many of the sections overlapped: that is, there were many papers presented in one section which properly belonged in another section, and there was no rule or regulation by which the officers of the sections co-operated to separate and classify papers so as to make the work effective. Your committee took up this work, and at the meeting in New Orleans your committee recommended that there should be a meeting annually, in the interim between sessions of the Association, of the officers of the various sections together with the general officers of the Association. Such a meeting as this was held last October in Chicago. Nearly all the officers of the sections were present at this meeting, together

with the general officers of the Association, and the work was gone over and arrangements made by which the officers of the sections could co-operate one with the other and increase the efficiency of the sections, elevate the standard of requirements for papers and exercise some discretion in securing papers. Arrangements were made for the classification of papers on kindred subjects together for discussion and to arrange the work of the sections after the manner of the great special organizations, so that every section could of itself be a complete society, addressing itself to scientific research. This has been productive of great good. The officers of the various sections are now working in co-operation, and I think we can justly say that never in the history of the Association has the work of the sections been in as good condition as that in which it will be entered on to-morrow morning.

Of course, there is much to be done, and doubtless your new committee will take up the work and continue it. But we have reason to feel gratified with the result of the co-operative work of the sections and the advancement of it along the lines of perfection.

On motion, the House of Delegates then adjourned until 2 p. m.

Second Meeting—Monday, June 6.

The House of Delegates reconvened at 2 p. m., and was called to order by the President.

On motion of Dr. J. N. McCormack, Kentucky, the reading of the minutes of the previous meeting was dispensed with.

Report of Committee on Miscellaneous Business.

Dr. Edwin Walker, Indiana, read the following report of the Committee on Miscellaneous Business:

ASSOCIATION MEDAL DISCONTINUED.

The Committee on Miscellaneous Business concurs in the report of the Committee on the Award of the Association Medal, and recommends that the award of a medal by this Association be discontinued.

SENN MEDAL COMMITTEE REPORT ACCEPTED.

As to the report of the Committee on Award of Senn Medal, the committee recommends that it be received, no further action being necessary.

Dr. W. T. Bishop, Pennsylvania, moved that in taking action on the report of the committee the report be divided. Seconded and carried.

Dr. Harold N. Moyer, Illinois, moved that that section of the report dealing with the award of the Association Medal be concurred in and adopted. Seconded.

Dr. W. T. Bishop moved that this part of the report be not adopted. Seconded.

After some discussion relative to the importance of continuing the award of the Association Medal, the motion of Dr. Bishop was voted down, and the original motion of Dr. Moyer to adopt was carried.

It was moved that the second part of the report in regard to the award of the Senn Medal be adopted and the committee continued. Seconded and carried.

Report of Committee on Constitution and By-Laws.

Dr. P. Maxwell Foshay, Illinois, read the report of the Committee on Constitution and By-Laws, which was referred to the new Committee on Constitution and By-Laws, Dr. M. L. Harris, chairman.

Report of Committee on National Incorporation.

Dr. Joseph D. Bryant, New York, chairman, read the report of the Committee on National Incorporation, which was referred jointly to the Committee on National Legislation, to the Reference Committee on Medical Legislation, and to the Board of Trustees.

PRELIMINARY REPORT TO THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION.

GENTLEMEN:—At the meeting of the American Medical Association, held at New Orleans in May, 1903, a resolution was adopted by the House of Delegates directing the appointment of a committee of five "to get advice of the best legal talent in the United States as to whether or not the Association could be incorporated under an act of Congress, and to report at the next annual session of the House of Delegates."

In accordance with the resolution the following were appointed as a committee:

Dr. Joseph D. Bryant, New York, Chairman.
Dr. H. L. E. Johnson, Washington, D. C.
Dr. Leartus Connor, Michigan.
Dr. D. E. Fairchild, Iowa.
Dr. C. G. Kenyon, California.
Dr. Frank Billings, Illinois, *ex officio*.

In the minutes of the meeting it immediately appears that the preceding resolution was amended by another which was "not seconded," authorizing "an expenditure of five hundred dollars for the purpose of obtaining opinions." Also it appears that during the discussion of the question "it was understood that no money should be expended for this purpose."

Under these somewhat perplexing circumstances the committee was constrained to limit its efforts to legal consultations that implied no pecuniary obligations whatsoever.

Fortunately in this respect the committee was especially favored, since it had at its command for the asking the advice of one who for fourteen years had been familiar with the affairs of this country by reason of that length of service in the House of Representatives at Washington. During this entire service in the House, this gentleman had served on the judiciary committee of the House, the last four of which (1898-92) he was chairman of that committee. During much of this time the perplexing constitutional questions arising as the outcome of the Spanish-American War were constantly under consideration in this committee. This gentleman (who has been a United States judge since 1902) is, therefore, it is believed, amply equipped both by theory and actual experience in constitutional matters to solve for us this question beyond the possibility of reasonable gainsay. The judge unhesitatingly declares that the proposed incorporation is constitutional in all respects, and that it has been his duty and pleasure in many similar instances in the past to draft such like bills and to secure their passage on the floor of the House, and that at the present time these bills are operative in the affairs of the country and are a part of the laws of the land. However, we can do no better at this time than to respectfully give our earnest attention to the written opinion of the gentleman on these questions.

JUDGE RAY'S OPINION.

"There can be no question that the proposed national or congressional charter for the American Medical Association as contained in the pamphlet entitled 'National Incorporation for the American Medical Association' at page 13 would (see last page of this report), if enacted into law, be free from all constitutional objections. A long line of decisions pronounced by the Supreme Court of the United States has settled the legality of acts of Congress creating this class of corporations. These decisions are clear and free from conflict.

"Under such a charter the incorporated body would be competent to acquire, by purchase, gift or otherwise, and hold or convey both real and personal property situated anywhere within the United States, and would be also authorized to hold its meetings and transact business anywhere within the limits of the Union. It would be necessary, of course, that these places for holding meetings and transacting business be designated in advance from time to time and due notice given. It would also be necessary and proper that the corporation have a principal place of business, but such main or principal place of business might be fixed in any state, and would not necessarily be located in the District of Columbia. The advantages of a national incorporation when the purposes of the organized body are national in their scope and character and the membership is scattered throughout the entire nation, are manifest and important, and such an association as the American Medical Association, with a membership coming from forty-five different states and our territories and the District of Columbia, ought not to be compelled to work within any one state or under the laws of any one state, as would be the case if incorporated under the laws of a state. These considerations in similar cases have had controlling weight with the Supreme Court of the United States, as bringing the charter or act of Congress plainly within the scope and language of the constitution.

"The persons created a body corporate by act of Congress constitute an independent body or corporation, and such body can in no way interfere with or take away the property or other rights or the privileges of a corporation having similar

aims or purposes heretofore or hereafter organized and incorporated under the laws of a state."

It therefore appears that no legal obstacle is interposed to securing actual incorporation under act of Congress of the American Medical Association.

JOSEPH D. BRYANT, Chairman.

PROPOSED SPECIAL CONGRESSIONAL CHARTER FOR THE AMERICAN MEDICAL ASSOCIATION.

The living ex-presidents of the American Medical Association (by name), the presidents of each state association (by name), and then the Board of Trustees (by name), and such others as may be associated with them, and their successors, are hereby constituted a body politic and corporate by the name, American Medical Association, with perpetual succession; with power to sue and to be sued, complain, or defend in any court of law or equity; to make and use a seal, and alter the same at pleasure; to acquire, take by devise, bequests, or otherwise hold, purchase and convey, such real and personal estate as shall be required for the purpose of its incorporation; to select such officers and agents as the business of the corporation shall require, and make by-laws not inconsistent with the laws of the United States.

Said corporation is empowered to found, establish and maintain in the District of Columbia an institution for the dissemination of general medical information to and education of the citizens of the United States. Said corporation or its House of Delegates or Trustees may hold meetings, and conduct any business of the corporation wherever expedient within the United States with a like purpose, and for the further purpose of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among physicians of the United States of America and of other countries, of safeguarding the national interests of the medical profession, of elevating the standard of medical education, of securing the enactment of medical laws, in directing and enlightening public opinion in regard to the broad problems of state medicine, and of representing to the world the practical accomplishments of scientific medicine.

On motion of Dr. Welch, Pennsylvania, a vote of thanks was extended to Judge Ray, New York, for his valuable legal opinion.

Adoption of Report on Medical Education.

Dr. Victor C. Vaughan, Michigan, presented the following report of the Reference Committee on Medical Education:

The Reference Committee approves and recommends the adoption of the suggestion made by the Committee on Medical Education, and that it be referred to the Committee on Amendments to the Constitution and By-Laws.

On motion of Dr. E. Eliot Harris, New York, the report of the Reference Committee was adopted.

Reference Committee on Sections and Section Work.

The President called for the report of the Reference Committee on Sections and Section Work.

Dr. A. P. Ohlmacher, Ohio, Chairman, stated that the Committee had no report to make at present.

Report of Committee on Hygiene and Public Health.

Dr. J. N. Hurty, Indiana, read the report of the Committee on Hygiene and Public Health, which was referred to the Reference Committee on Hygiene and Public Health.

On motion the House of Delegates then adjourned to meet at 2 p. m., Tuesday, June 7.

Medical Organization.

Illinois.

FOX RIVER VALLEY MEDICAL ASSOCIATION.—At its seventy-eighth semi-annual meeting, held in Elgin, May 10, the committee appointed to arrange details of affiliation with the Illinois State Medical Society made its report and the constitution of the association was amended in accordance with the requirements of the state society and the American Medical Association.

Indian Territory.

THE ORGANIZATION of the medical societies of Indian Territory is now completed in accordance with the plan of the American Medical Association. In lieu of counties, judicial district societies have been organized.

Iowa.

JOHNSON COUNTY MEDICAL ASSOCIATION.—On May 26, 13 physicians of the county met at Iowa City and organized on the standard plan. The following officers were elected: Dr. Walter L. Bierring, president; Dr. Albertus J. Burge, vice-president; Dr. Joseph A. Valenta, secretary-treasurer, Dr. John B. Kessler, delegate to the state society and Drs. William R. Whitcis, Albertus J. Burge, and Laura H. Branson, censors, all of Iowa City.

Minnesota.

FREEBORN COUNTY MEDICAL SOCIETY.—On May 29 this society and the Albert Lea District Medical Society met in joint session at Albert Lea and the societies merged, under the name of the former, the members of the district society who lived outside of the county being made honorary members. Dr. Albert C. Wedge, Albert Lea, was elected president; Dr. William L. Palmer, Glenville, vice-president; Dr. George A. Stevenson, Albert Lea, secretary, and Dr. John P. Von Berg, Albert Lea, treasurer.

Montana.

NORTHEAST MONTANA MEDICAL ASSOCIATION.—Physicians of Chouteau and Valley counties, met at Chinook, recently and organized this society with Dr. Francis B. Atkisson, Fort Benton, president; Dr. Charles F. Hopkins, Chinook, vice-president, and Dr. Patrick H. O'Malley, Chinook, secretary and treasurer.

North Carolina.

LENOIR COUNTY MEDICAL SOCIETY.—Dr. David T. Tayloe, Washington, councilor for the second district, met eight physicians of the county at Kinston, May 13, and assisted in the organization of a county society on the standard plan, with the following officers: President, Dr. Richard W. Wooten, Coahoma; vice-president, Dr. Charles B. Woodley, Kinston; secretary, Dr. William F. Hargrove, Kinston; treasurer, Dr. Romulus A. Whitaker, Kinston, and delegate to the state society, Dr. James M. Parrott, Kinston.

Rhode Island.

WOONSOCKET DISTRICT MEDICAL ASSOCIATION.—This association was organized on the standard plan, in April, and elected Dr. William C. Monroe, president; Dr. Elisha D. Clarke, secretary, and Drs. Elisha D. Clarke and William F. Barry, delegates to the Rhode Island Medical Society, all of Woonsocket.

Society Proceedings.

COMING MEETINGS.

Medical Society of Delaware, Lewes, June 14.
Wisconsin State Medical Society, Milwaukee, June 22.
Washington State Medical Association, Seattle, July 13-15.

AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.

Tenth Annual Meeting, held in Chicago, May 30-June 1, 1904.

The Society met in the Banquet Hall of the Auditorium Hotel, under the Presidency of Dr. Norval H. Pierce, Chicago.

Dr. Frank Billings, Chicago, delivered an address of welcome.

Election of Officers.

The following officers were elected: President, Dr. F. C. Cobb, Boston; vice-presidents, Drs. Wm. Cheatham, Louisville, Ky., Thomas Hubbard, Toledo, Ohio, S. MacCuen Smith, Philadelphia, and W. B. Shields, St. Louis; secretary, Dr. Wendell C. Phillips, New York City; treasurer, Dr. Ewing W. Day, Pittsburg, Pa.

Boston was selected as the place for holding the next annual meeting.

President's Address.

The president, Dr. Norval H. Pierce, in his address, pointed out the great changes that had been wrought in the specialty during ten years. The well-rounded and successful specialist must not only possess special skill and dexterity with complicated mechanisms and functional tests, but he must have a broad surgical knowledge equal to that of the general surgeon, and an ever-accessible knowledge of regional anatomy superior thereto. He expressed the fear that the pendulum might swing

too far in the direction toward radicalism. With the technic of external operations firmly within grasp, he asked, were not the members liable to resort to them prematurely—to forget that much might be done by more conservative local measures?

DR. A. LOGAN TURNER, Edinburgh, Scotland, read a paper on "The Pathology of Bone Cysts in the Accessory Sinuses of the Nose."

Chronic Otitis Media.

DR. JAMES F. MCKERNON, New York City, reported cases, and sounded a note of warning, in atypical cases, against delaying too long a search for the cause in the original focus of infection, when the patient did not progress well.

What the Laryngologist May Do for the Correction of Some of the More Common Forms of Defects of Speech.

DR. G. HUDSON MAKUEN, Philadelphia, said that an important field was neglected, namely, defects of speech, the treatment of which had either been entirely neglected or relegated to quacks. It had been estimated that every one of the 300,000 stammerers in the United States is a proper subject for medical supervision by the laryngologist, rhinologist and otologist. The exciting cause in 98 per cent. of all cases of stammering may be looked for in a morbid condition of some portion of the respiratory tract. Adenoids, enlarged turbinals and chronic rhinitis are causes of stammering. The laity and some physicians thought children would "grow out of" speech defects, and, therefore, they became nerve habits before any treatment was given. Treatment should be the removal of all physical obstructions to normal respiration, teaching physiologic breathing and the elementary sounds used in language; digestive disturbances should be corrected, tobacco and stimulants of all kinds interdicted, and the nervous system supported by nourishing food and plenty of sleep. Suggestion always plays an important part. Dr. Makuen had found the use of hypnotism of immense value. Stammerers should be taught to speak, and as far as possible even to think, in syllables.

Malignant Disease of the Upper Air Passages.

DR. CHEVALIER JACKSON, Pittsburg, said that serotherapy and ray-treatment were not yet proved of benefit. Unless total removal of infection was a reasonable possibility, no operation was justifiable except tracheotomy, esophagotomy or whatever else might be planned to prevent or postpone inanition or asphyxia. The curette had no place in the extirpation of laryngeal malignant disease. It rubs in the infection, as a rake buries seed in the soil. A clean cut with knife and scissors through healthy tissues beyond the invaded area is the best method.

Orbital Infection from the Ethmoid Cells, with Spontaneous Opening at the Inner Angle of the Orbit.

DR. CARL E. MUNGER, New York City, said it was apparent to him that the number of cases recently reported was much less since the rhinologist had been developed, and our knowledge of intranasal diseases had increased and intranasal surgery had become more nearly perfected. This was undoubtely due to the earlier diagnosis made possible by more extended information as to ethmoid diseases, and the greater promptness with which the ethmoid region was attacked surgically.

Diseases of the Salivary Ducts and Glands and Their Treatment.

DR. ROBERT C. MYLES, New York City, reported cases, from which he argued (1) that it was necessary to make a thorough test of every known method to obtain a correct diagnosis in suspicious cases; (2) that the removal of calculi could best be accomplished by surgical procedures, preferably through the floor of the mouth; and (3) that it was always well, when possible, to probe and dilate the duct, and thus establish and maintain the normal flow of the salivary secretion.

The Relation of Diseases of the Stomach to Affections of the Mouth, Nose and Throat.

DR. ROBERT LEVY, Denver, said that three positive statements might be made clinically: 1. Certain affections of the upper air passages and their adjacent cavities are causative in a measure of some form of stomach disturbance. 2. Certain stomach disturbances are the cause of certain affections of the upper air tract. 3. The relationship existing between digestive disturbances and certain diseases of the upper air passages was so close that treatment must necessarily involve attention to both conditions.

Treatment of Tubercular Laryngitis.

DR. S. E. SOLLY, Colorado Springs, said that most physicians were too timid in handling the tubercular larynx, resorting in their blindness to superficial treatment, and to sedatives in their mistaken kindness, when in most cases they had far better use radical measures.

Other papers were read and cases presented as follows:

"Uses of Rubber in the Treatment of Nasal and Antral Diseases," by Dr. Price Brown, Toronto, Ontario; "Tinnitus Aurium and Its Treatment," by Dr. W. S. Bryant, New York City; "Papilloma of the Larynx, with Report of a Case of Forty Years' Standing," by Dr. Wm. L. Culbert, New York City; "Chronic Empyema of the Sphenoidal Sinus," by Dr. H. Holbrook Curtis, New York City; "Purulent Otitis Media Complicating Typhoid Fever," by Dr. Ewing W. Day, Pittsburg, Pa.; "Adeno-Carcinoma Occupying All of the Sinuses, Nose and Orbits," by Dr. W. H. Dudley, Easton, Pa.; "Bezold's Variety of Mastoid Disease Complicating Diabetes Mellitus," by Dr. S. MacCuen Smith, Philadelphia; "The Value of Early Incision of the Membrana Tympani in the Treatment of Acute Suppuration in the Middle Ear," by Dr. Francis R. Packard, Philadelphia.

In the "Symposium on Malignant Growths of the Upper Air Passages," Dr. F. C. Cobb, Boston, discussed the nose and accessory sinuses; Dr. Max A. Goldstein, St. Louis, the mouth and pharynx, and Dr. D. Braden Kyle, Philadelphia, the pathology of the growths.

Cases were reported by Drs. Lewis A. Coffin, New York City; Joseph A. White, Richmond, Va.; Arthur B. Duel, New York City; James F. McCaw, Waterbury, Conn.; Edward B. Dench and T. Passmore Berens, New York City, cited four interesting cases of mastoiditis. The first was one of acute suppurative otitis media; mastoiditis; subperiosteal mastoid abscess; perisinus epidural abscess, which was operated on by the surgeon.

AMERICAN GYNECOLOGICAL SOCIETY.

Twenty-ninth Annual Meeting, held in Boston, May 24-26, 1904.

(Concluded from page 1510.)

Uretero-Lithotomy.

DR. J. WESLEY BOVÉE, Washington, D. C., gave the history of this operation and discussed the routes. He stated that all uretero-lithotomy wounds should be drained, because the urine was practically never normal, rendering wound infection probable. The possibility of urinary leakage subsequent to operation afforded another positive indication for drainage.

Nephrectomy for Primary Tuberculosis of the Kidney.

DR. HIRAM N. VINEBERG, New York, said that tuberculosis of the kidney, both primary and secondary, was twice as frequent in women as in men. Renal tuberculosis in women was rarely associated with tuberculosis of the genital organs. A cystitis in women that resisted the topical applications of the silver nitrate solution by the Kelly method should be looked on with marked suspicion as being of a tubercular character, even though repeated urinalyses should show no tubercle bacillus. The differential diagnosis of a non-tubercular from a tubercular cystitis with the aid of a cystoscope was not as reliable as the therapeutic test outlined in the preceding sentence. Pronounced reddening or ulceration about the mouth of one of the ureters, with absence of other bladder changes, was held by some authorities as pathognomonic of tuberculosis of the corresponding kidney; while the sign was an important one, too much weight should not be attached to it in women. In most cases the removal of the diseased kidney would bring about practically a cure of the descending cystitis. He doubted the wisdom of the advice to cure the cystitis before undertaking the removal of the kidney. The prognosis of nephrectomy in renal tuberculosis in women was very good. Of the writer's

four cases operated on, seven, five, two and one and a half years ago respectively, all were alive and in good health.

DISCUSSION.

DR. J. WESLEY BOVÉE said the surgeon should be sure that the opposite kidney could excrete urine for the whole body before removal of one tuberculous kidney. A nephrotomy might be done, and the kidney most markedly diseased drained, without taxing the other kidney to a great extent.

DR. PHILANDER A. HARRIS, Paterson, N. J., said that in cases of tuberculosis of the kidney it was difficult, where the bladder was corrugated and changed by the pathology present, to find the ureter; he suggested painting the entire field of the bladder with some solution, as Prussian blue. By this method he had succeeded in finding the ureters which he could not otherwise locate.

DR. SETH C. GORDON reported two cases in which autopsy after the removal of one kidney revealed that only one kidney had existed.

DR. J. M. BALDY said it was not uncommon to have practitioners ask if the ureters had been catheterized in cases of supposed kidney disease, and not infrequently a healthy kidney was palpated and found on one side which utterly failed to secrete with the patient under an anesthetic or without it. In some instances this failure on the part of the kidney to secrete was undoubtedly brought about by the influence of the anesthetic. He had had exactly the same experience a number of times in patients whose ureters he had catheterized, but to whom no anesthetic had been given.

DR. GEO. M. EDEBOHLS advocated that before removing a kidney an incision should be made on the opposite side to determine by actual inspection and palpation the presence of another kidney and its probable health, so far as could be determined macroscopically, before removing the diseased kidney. He had adhered to this rule in all nephrectomies performed since that time, and in one case he had saved a woman's life by so doing.

DR. J. RIDDLE GOFFE, New York City, reported a case in which removal of three inches of the ureter in connection with a tuberculous kidney, resulted in recovery and the patient is now in health eight years later.

DR. EDWARD REYNOLDS, Boston, gave his experience of ten nephrectomies for tubercular disease, seven of them being complete nephro-ureterectomies, all successful, so far as operative mortality was concerned.

Hypertrophies and Inflammations About the Urinary Meatus.

DR. ROBERT L. DICKINSON, Brooklyn, read this paper at the afternoon session of the first day. The frequency and the suffering caused by these conditions give them an importance out of all proportion to their minute size. They are overlooked because hidden among folds of mucous membrane. The cure of chronic inflammation is only feasible by obliteration of the glands.

Surgery of the Female Urethra.

DR. ELY VAN DE WARKER, Syracuse, N. Y., said that after removal of the prolapsed portion of the urethra there was a marked tendency to recurrence unless the causal conditions were cured. Stricture of the urethra is common in women. Any condition that tends to produce linear or annular thickening leads to stricture. Eversion of the mucous membrane at the meatus may come from stricture; its surest cure is by dilatation.

Pyelitis Complicating Pregnancy.

DR. EDWIN B. CRAGIN, New York, said this cause of confusion with appendicitis, typhoid fever or salpingitis, occurs almost invariably on the right side. It is due to pressure on the ureter by the pregnant uterus plus an infection, due to the colon bacillus. The urine is acid, containing at first albumin and perhaps a few casts, soon followed by pus and bacteria. The prognosis is usually good. Induction of labor is seldom indicated. The medical treatment by urotropin, or allied drugs, with ice-bag over the kidney, fluid diet, and large draughts of water, is usually sufficient.

A Second Case of Puerperal Eclampsia Successfully Treated by Renal Decapsulation.

DR. GEORGE M. EDEBOHLS, New York City, reported a case in which the convulsions were arrested, the flow of urine was reestablished, and a threatened death from uremia was averted. Renal decapsulation thus became a rival of forced delivery in cases of puerperal convulsions of renal origin.

Repair of Lacerations of the Cervix Uteri.

DR. EDWARD P. DAVIS, Philadelphia, on the second day, read the first paper of a symposium. In his experience immediate closure of the cervix has given no inconvenience to the mother, and has been followed by excellent results. This operation is not advised for those who do not practice obstetrics with good surgical technic, and who are not competent to operate on the genital tract.

DR. ROBERT L. DICKINSON, Brooklyn, read a paper urging that no complicated or considerable perineal injury should be repaired at the close of labor, but three to five days later, preferably on the fifth day.

DR. J. M. BALDY, Philadelphia, read a paper stating that if the parts were preserved from infection, the greater part of a tear in the cervix would heal spontaneously, and the rest of it would remain perfectly healthy. The lips would remain uninfiltrated, of normal size and thickness, with no eversion and no erosion of the lining mucous membrane. In such a case there would be no untoward symptoms and no bad effects whatever. He had no part in the belief that lacerations of the cervix produced carcinoma.

President's Address.

DR. EDWARD REYNOLDS, Boston, in his presidential address, stated that the use of the printed abstract published beforehand had of late become increasingly prominent in many societies, and in the British Medical Association this use of the abstract had reached its highest point. It was seldom wise to adopt wholesale the regulations of other organizations. It was usually better to let changes follow a more gradual and natural evolution under the needs of the individual assembly, but the methods of the English association were worth a passing consideration. He said that a member of the British Medical Association who desired to present a paper at one of its meetings must put it in the hands of the secretary complete and in the form in which he desired its publication a number of weeks before the meeting, and the communication might be of any length he chose. A paid secretary, a qualified and experienced medical author, then abstracted each paper in the form and length which he considered best fitted for its public delivery. This official then read the abstracts to the society as they called on the program. Such a reading inaugurated each discussion, and the member whose ideas had been thus succinctly set forth before his associates took part in the discussion and closed it. The ideas of individual members by this method were better and more intelligently presented than if they had read their complete papers. Time was economized, full debate was encouraged, and the members had the advantage of publishing to the world papers in which their points were set forth at the fullest length and without time limitation. He recommended that the society give this method, or a modification of it, a year's trial.

The Preventive Treatment of Pelvic Floor Lacerations.

DR. J. CLIFTON EDGAR, New York City, said that the causal factors should be prevented, namely: Too rapid expulsion of the fetus; relative disproportion in size between the presenting part and the parturient outlet; a faulty mechanism of labor. He recommended preliminary digital stretching of the vulval outlet in primipara.

Immediate Repair of Lacerations of the Perineum.

DRS. LAPTHORN SMITH, Montreal, and HENRY C. COE, New York City, advised immediate repair, and the former advised placing the sutures before the tears occurred, so as to bring the tissues together as before the tear.

Uniformity in Pelvic and Cranial Measurements.

DR. A. F. A. KING, Washington, D. C., said that the measurements of the normal pelvis and fetal head are indefinite, and

proposed an ideal or hypothetical head and pelvis on the dimensions of which all authorities may agree. A committee was appointed by the president to consider the matter and report at the next annual meeting.

Symposium on Non-Operative Local Treatment in Gynecology.

DR. WILLIS E. FORD, Utica, N. Y., said that the nervous habit could not be cured by surgery, and that local irritations ought to be treated by skilled gynecologists and not allowed to develop either the mental or physical ailments which were so common a result.

DR. WALTER P. MANTON, Detroit, Mich., said that three factors were largely responsible for the neglect of medical gynecology: 1. The average physician's lack of knowledge in the accurate diagnosis and local treatment of pelvic disease. 2. The allurements and fascinations of surgery. 3. Competition in practice.

Treatment Preparatory to Operation.

DR. HENRY C. COE, New York City, questioned the actual value of the hot vaginal douche, local applications to the vaginal fornix, treatment of the ectopic cervix, etc., previous to trachelorrhaphy, since the diseased tissue would all be removed at once by amputation. At the same time, he admitted the remarkable results often observed as regards the absorption of extensive pelvic exudates. Acute and subacute inflammations in and around the adnexa form the real contraindication to operation, and doubtless surgeons are not always as careful as those of the former more conservative generation in selecting their cases. Competition and the rush of modern life are responsible for some ill-advised operations, minor, as well as major.

The Value of Post-Operative Local Treatment.

DR. J. RIDDLE GOFFE, New York City, said the experience of all observers was that local treatment relieved congestion, pain and discomfort, inaugurated, hastened and accomplished the absorption of edema, plastic exudate, adhesions and pseudohypertrophy. If it would relieve these conditions, how much more certainly would it prevent them.

DR. CHAS. SEDGWICK MINOT, Boston, discussed "The Implantation of the Human Ovum in the Uterus."

Bathing During the Menstrual Period.

DR. J. CLIFTON EDGAR, New York, presented the following conclusions on this subject:

1. All forms of bathing during the menstrual period are largely a matter of habit, and usually can be acquired by cautious and gentle progression, but not for every woman does this hold good, and surf bathing, where the body surface remains chilled for some time, should always be excepted. 2. A daily tepid sponge bath (85 to 92 F.) during the menstrual period is not only a harmless proceeding, but is demanded by the rules of hygiene. 3. In the majority of, if not all, women tepid (85 to 92 F.) sponge bathing after the establishment of the menstrual flow, namely, second or third day, is a perfectly safe practice. 4. Furthermore, in most women the habit of using the tepid shower or tub bath after the first day or two of the flow can with safety be acquired.

The Nature of the Indications for Operation for Fibroid Tumors of the Uterus.

DR. CHAS. P. NOBLE, Philadelphia, presented a table of 1,188 cases of fibroid tumors operated on, and said that they showed the classical teachings concerning fibroid tumors to be erroneous. These teachings were that fibroid tumors of the uterus were benign growths, which usually produced but few symptoms, and which after the menopause underwent retrogressive changes, becoming smaller or disappearing; that the chief danger of fibroid tumors consisted in the fact that at times they caused hemorrhages from the uterus, and that rarely they cause trouble because of their size or on account of pressure on adjacent viscera. At least one-third of the women having fibroid tumor would have died had they not been submitted to operation.

Treatment of Gonorrhea.

DR. HENRY T. BYFORD, Chicago, advocated prolonged irrigations with hot water as a basis, and spoke of frequent injections of hot water as a substitute for prolonged irrigations. He referred to hydrogen dioxid and unirritating germicidal solutions as substitutes for plain water injections.

ASSOCIATION OF AMERICAN PHYSICIANS.

Nineteenth Annual Meeting, held at Washington, D.C., May 10-11, 1904.

(*Concluded from page 1510.*)

Types of Splenic Anemia or Splenomegaly.

DR. ALFRED STENGEL, Philadelphia, reported cases. One was of a colored woman, aged 25, perfectly healthy, who had had an abdominal tumor for five or six years, which was found to be due to an enlarged spleen. There was no history of malaria. A splenectomy was done and, in spite of an intercurrent pneumonia during convalescence from the operation, the patient recovered perfect health. The blood after the operation showed a reduction of the polymorphonuclear leucocytes, and an increase of the lymphocytes and the transitional cells. The spleen showed a large number of umbilicated nodules, which were hard and solid. On section these nodules were seen to be of a neoplastic character, and were found to represent alveolar spaces filled with endothelial cells and giant cells. There was no necrosis; there were no tubercle bacilli; there were neither bacteria nor protozoa. The organ looked as though some infective process was responsible for the condition, which Stengel considered to be a primary splenomegaly. While syphilis is possible, he did not seriously consider it.

DISCUSSION.

DR. WILLIAM OSLER, Baltimore, said that there is a great deal of difficulty in differentiating between the various forms of enlargement of the spleen. Out of the 9 cases that he had seen recently of enlargement of the spleen with anemia, he had cases that belonged to four classes: (1) primitive splenomegaly; (2) chronic splenic anemia, characterized by enlarged spleen, secondary anemia, leucopenia and pigmentation; (3) enlarged spleen, with the early occurrence of liver symptoms; and (4) splenic anemia, which subsequently developed into pernicious anemia.

DR. GEORGE DOCK, Ann Arbor, Mich., said that we should be doing more in the way of operation in these cases. It ought to be possible to separate endothelioma from the other cases, and to offer those patients the benefit of a splenectomy.

DR. B. W. SIPPY, Chicago, said that he had seen a case of enlarged spleen, which was diagnosed splenic anemia, which after operation showed a decided improvement in the blood picture. The spleen showed the ordinary splenic hyperplasia.

DR. RICHARD C. CABOT, Boston, said that there is no evidence that any anemia is due to malnutrition alone.

DR. WILLIAM OSLER, Baltimore, said that in the cases of enlarged spleen in men returned from the tropics, search should be made for the Leishman-Donovan blood parasites.

DR. ALFRED STENGEL emphasized the fact that the third patient reported was in the best of health before the operation and presented no sign of malnutrition.

Trypanosomes.

DRS. F. G. NOVY, W. J. MCNEAL and C. B. HARE, Ann Arbor, Mich., read a paper entitled "The Cultivation of Trypanosoma Evansi," which appeared in THE JOURNAL May 28.

DRS. F. G. NOVY and W. J. MCNEAL, Ann Arbor, Mich., read a paper entitled "The Agglutination and Filtration of Trypanosomes."

Zonal Necrosis of the Liver.

DR. E. L. OPIE, Baltimore, said that the hepatic lobule may be divided into three zones, each of which may be the seat of coagulation necrosis affecting the liver cells. In 14 cases this necrosis was found between the center and the periphery of the lobule, while in other instances the area of necrosed cells was limited either to the peripheral zone or to the central area. Such necrosis is dependent on the presence of toxic substances in the blood, and the distribution of the lesion is the result of the conditions of the circulation within the organ. By experimental injections in the lower animals, it is possible to demonstrate the existence of this subdivision of the liver lobules into three zones. The cases of necrosis in the peripheral zone seen in the human subject were often associated with eclampsia: Out of 9 cases in which necrosis was situated in the middle zone, 6 were associated with acute peritonitis, 3 due to streptococcus, and 3 were associated with gastrointestinal lesions. In case of pernicious vomiting in the third month of

pregnancy, midzonal necrosis was found which resembled icterus gravis, and which was accompanied by fatty degeneration in the central portion of the lobule. When regeneration takes place, the new cells arise from the cells in the periphery of the lobule which have escaped necrosis.

Addison's Disease with and without Adrenal Tuberculosis.

DR. C. F. WITHINGTON, Boston, read this paper. The symptom-complex known as Addison's disease is more likely due to suspension of the function of the suprarenal gland than to any anatomic lesion. The author divides the cases of this complaint and the lesions of the adrenal body as follows: I, Cases with bronzing; A, adrenal tuberculosis, commonest type. B, Non-tuberculous lesions of the adrenal body (1) atrophy, (2) interstitial inflammation, (3) carcinoma, (4) occlusion of vein, (5) hemorrhage. C, No adrenal disease (1) with lesion of the semilunar ganglion, (2) with no lesion of the semilunar ganglion, (3) pigmentation, not Addison's disease. II, Cases without skin bronzing. A, Adrenal tuberculosis (1) with tuberculosis elsewhere in the body, (2) without tuberculosis elsewhere in the body. B, Adrenal disease, not tuberculous; (1) carcinoma, (2) tumors, (3) necroses.

Election of Officers.

The following officers were elected for the ensuing year: President, Dr. E. L. Trudeau, Saranac Lake, N. Y.; vice-president, Dr. Frank Billings, Chicago; secretary, Dr. Henry Hun, Albany; recorder, Dr. S. Solis Cohen, Philadelphia; treasurer, Dr. J. P. C. Griffith, Philadelphia; councilor, Dr. F. Forchheimer, Cincinnati.

Book Notices.

APPLIED MATERIA MEDICA. A Text-book Intended for the Use of Nurses in Hospital Training Schools. By J. Henry Schroeder, Ph.G., M.D., Formerly Lecturer on Materia Medica in the Jewish Hospital Training School for Nurses, Cincinnati. Cloth. Pp. 113. Cincinnati: Robert Clarke Co.

A special work like this will be found of advantage to an intelligent woman engaged in the profession of nursing. As a text-book for training schools it gives as full information as is needed by nurses.

IMMUNE SERA. Hemolysins, Cytotoxins and Precipitins. By Professor A. Wassermann, M.D., University of Berlin. Authorized Translation. By Charles Bolduan, M.D. First Edition. First Thousand. Cloth. Pp. 77. Price, $1.00. New York: John Wiley & Sons. 1904

Wassermann takes up the principles and theories of action of the immune sera, and writes especially for those who are so busily occupied in practical medicine that they have no time to follow the intricate experiments on which these principles and theories rest. Consequently experimental details are omitted and the subject is presented in a consecutive readable form, the style of which has in no way suffered by the translation. The hemolytic sera are given especial consideration; they are of great importance inasmuch as many of the principles of immunity have been worked out in connection with them. The Ehrlich side-chain theory, and the various terms used in connection with immunity, such as amboceptor, complement, anticomplement, etc., are given lucid expositions. A second section treats of other cytotoxic sera, such as those derived by immunization with leucocytes, or nervous tissue; reference is made to possible practical application of such sera. The chapter on precipitins deals with those sera which have the power of precipitating albumins from various sources, and with their practical uses.

THE THERAPEUTICS OF MINERAL SPRINGS AND CLIMATES. By I. Burney Yeo, M.D., F.R.C.P., Emeritus Professor of Medicine in King's College, London. Cloth. Pp. 760. Price, $3.50 net. Chicago: W. T. Keener & Co. 1904.

The work is divided into two parts, the first being devoted to a study of mineral springs taken up in alphabetical order. Resorts of minor importance appear in smaller type and are described briefly, which gives to the reader the advantage of the author's experience and knowledge as to the relative importance of the various springs. In the first chapter the author has discarded the terms "muriated" and "acidulous" in his classification of springs, as being misleading and obsolete, and while he makes no sharp lines in his classification, he regards the following as the most practical one: 1. Indifferent thermal waters characterized by their temperature, varying from 80 F. to 150 F., by their feeble mineralization and by their great softness. 2. The common salt waters, including not only sodium chlorid in varying strength, but other chlorids and the bromids and iodids. 3. The alkalin waters, containing sodium bicarbonate alone or combined with sodium chlorid and sodium sulphate. 4. The bitter waters, the chief constituents of which are the sulphates of magnesium and sodium. 5. The iron or chalybeate waters, the iron occurring in the form of the bicarbonate. 6. The earthy or calcareous group containing the lime compounds. 7. The sulphur waters—a very large group. 8. The arsenical waters, which contain arsenic in varying proportions, either arsenious acid or the bromid and iodid of arsenic. The author then takes up the modes of application and action of mineral waters, together with their curative properties. In the second part he treats of climate and climatic resorts, sea or mountain, the application and selection of suitable climates.

A TEXT-BOOK OF PHYSIOLOGY. By Isaac Ott, A.M., M.D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia. With 137 Illustrations. Cloth. Pp. 563. Price $3.00 net. Philadelphia: F. A. Davis Company.

This is well adapted to the purposes for which it was written, namely, a student's "Elementary Work Containing the Chief Facts of Physiology Which are Necessary to the Student Who Wishes to Apply Them in the Practice of Medicine." Professor Ott has used good judgment in his choice of physiologic facts to present to the student of medicine. The advantage of a brief manual for the student is that it is presumed to contain only the facts of fundamental importance which would naturally be presented and emphasized by any teacher of physiology. This method of presenting the subject leaves to the teacher the privilege of introducing such supplementary matter as may seem wise. If a voluminous text-book be put into the hands of the student the teacher is forced to one or the other of the two alternatives: He must either omit a considerable portion of the text and introduce matter which to him may seem more important; or he must require the student to master the whole text as written, thus subordinating his own individuality and that of his department to that of another, namely, the author of a text-book. In the light of these facts, one must commend Professor Ott's work on physiology as well adapted to the use of the average medical student. The chapters on digestion and absorption precede those of blood, circulation and respiration, an arrangement which is a more logical one than that usually followed. While this arrangement has its advantages, it has the disadvantage of introducing the student to intricate problems of chemistry at the beginning of his course in physiology, which is usually the beginning of his first year and before he has had much general chemistry, at least in too many schools. Such an arrangement is very likely to result in a student getting only a superficial knowledge of the chemistry of digestion and metabolism. The chapter on electro-physiology is introduced between those on the muscular system and the nervous system. This arrangement, too, has its advantages and disadvantages. The logical position of the chapter on electro-physiology is maintained by Professor Ott, and is to be commended in the interests of clear teaching and of clear understanding on the part of the student. From the standpoint, however, of the experimental presentation of physiology, it is practically universal to present muscle nerve physiology first in physiologic laboratory texts; the technic used in this field of physiology is simple, and practically makes the foundation for that which is to follow in the work on circulation, respiration and nervous systems.

LABORATORY MANUAL OF PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY, for Students in Medicine. By Dr. E. Salkowski, Professor in the University and Director of the Chemical Laboratory of the Pathological Institute, Berlin. Authorized Translation from the Second Revised and Enlarged German Edition. By W. R. Orndorff, A.B., Ph.D., Professor of Organic and Physiological Chemistry in Cornell University. With 10 Figures and a Colored Plate of Absorption Spectra. First Edition. First Thousand. Cloth. Pp. 263. Price, $2.50. New York: John Wiley & Sons. 1904.

This manual is a clear and concise summary of the reactions and tests that have been found most practically useful for the medical student, both before and after graduation. Chapter I

on the "Examination of Milk" takes up in order the following subjects: General properties of milk, separation of milk into its constituents, precipitation with magnesium sulphate, action of rennin on milk, preparation of lactic acid. Each of the other chapters is subdivided in a similar way, making the whole book admirably clear and easy for reference. Methods that are of little practical value, or that have been superseded by better ones, are left out. Only the cream of the subject is retained. The chapters on the "Examination of Muscular Tissue" and on "Gastric Digestion" are particularly interesting in view of the growing importance of dietetics as a factor in the treatment of diseases of the digestive tract. Footnotes have been added by the translator to keep the book up to the times. For example, the alcoholic solution of dimethylamidoazobenzol, which is practically the only reagent now used for the detection of free hydrochloric acid in stomach contents, is not referred to in the text, but is mentioned in a footnote. No reference is made to the quantitative determination of free hydrochloric acid with this reagent and a decinormal solution of caustic soda; a test with which every one who undertakes to treat diseases of the stomach ought to be familiar. Some weakness appears also in regard to the estimation of the digestive power of fluids. Either Mett's or Hammerschlag's or Bettman's method is preferable to the one given in the text. After an excellent chapter on examination of the blood the author discusses the examination of pathologic transudates, cystic fluids. Then follow chapters on saliva and salivary digestion, the pancreas, bile, biliary calculi, urine, urinary calculi, the liver, bone, adipose tissue, yolk and white of the egg, and the products of the putrefaction of proteids. For the student who wishes to pursue the subject still further are added ten chapters on quantitative analysis. In these are discussed with sufficient fullness for practical purposes the analysis of meat, milk and bread. These processes are not usually given in a brief manual of this kind, and their presence adds very materially to the value of the book. The quantitative examination of urine, feces and blood, the determination of hydrochloric acid, or glycogen, and of the rate of digestion, complete the text. In the appendices are placed a list of reagents, tables of specific gravities, and a list of international atomic weights.

LECTURES, CHIEFLY CLINICAL AND PRACTICAL, ON DISEASES OF THE LUNGS AND THE HEART. By James Alexander Lindsay, M.D., F.R.C.P. (Lond.), M.A., Professor of Medicine, Queen's College, Belfast. Cloth. Pp. 447. Price, $3.50 net. New York: Wm. Wood & Co. 1904.

This book contains twenty-one lectures which the author delivered at the Royal Victoria Hospital of Belfast during the past fifteen years. They deal with problems and difficulties which confront the physician in the diagnosis, prognosis and treatment of the common diseases of the chest. The first thirteen lectures are devoted to the lungs and pleura, and of these the first three are introductory and concern methods of physical examination and anamnesis. The last eight lectures deal with cardiac disease, chiefly valvular, the first three being devoted to methods of examining the heart and blood vessels. The lectures are eminently practical, the style is clear and terse, but it strikes one as rather peculiar and disappointing not to come across any exposition of the pathology of the diseases considered and only passing allusions to etiology. For this reason the work commends itself to practitioners and not to students of medicine, unless it be assumed that senior students are so familiar with causation and pathology as to need no further exposition of these subjects. The value of the book would be greatly enhanced had the author introduced a brief discussion of these important phases of thoracic disease. It is worthy of note that Professor Lindsay places himself squarely with those who regard the crepitant râle of pneumonia as a pleuritic exudation râle, the view first advocated we believe by Leming of New York. Although granting that it is difficult if not impossible to conceive of this râle as caused by the entrance of air into air vesicles, still we think the arguments adduced by Lindsay and other supporters of the pleuritic origin of the sound are not convincing. We have heard râles undoubtedly generated by pleural friction, which closely resembled the true crepitus of pneumonia, but there was a perceptible difference which, together with the clinical fact that the true pneumonic râle occurs only at the beginning and close of pneumonia and not when consolidation is complete, seems to us strong evidence in favor of the intrabronchial origin of this adventitious sound. We were greatly pleased with what the author says regarding the importance of the early recognition of pulmonary tuberculosis and its bearing on prognosis and treatment. What he says concerning prognosis in this disease is especially good, and it is a matter for rejoicing that so able and influential a physician as Dr. Lindsay emphasizes the value of the open-air treatment of tuberculosis at home as against drug therapy and the sending of consumptives away from home. The inculcation of such views is one of the advances of the day and one of the greatest duties of the clinical teacher of internal medicine. The lectures on cardiac disorders are commendable and furnish additional proof of the practical utilitarian views of this teacher. On the whole the volume will prove a desirable addition to the working library of the general practitioner, who is already provided with treatises which deal with those aspects of thoracic disease not considered in this volume.

State Boards of Registration.

COMING EXAMINATIONS.

Ohio State Board of Medical Registration and Examination, Columbus, June 13-15. Secretary, Frank Winders, M.D., State House, Columbus.

Michigan State Board of Registration in Medicine, Lansing, June 14. Secretary, B. D. Harison, M.D., Sault Ste. Marie.

Board of Medical Examiners for the State of Texas, Houston, June 15, Secretary, M. M. Smith, M.D., Austin.

Board of Medical Examiners of Maryland, Lehman's Hall, Baltimore, June 15-18. Secretary, J. McP. Scott, Hagerstown.

Missouri State Board of Health, Kansas City, June 20-22. Secretary, W. F. Morrow, M.D., Kansas City.

Medical Society of Delaware, Dover, and the Homeopathic Medical Society of Delaware State and Peninsula, Wilmington, June 21. Secretary Medical Council, P. W. Tomlinson, M.D., Wilmington.

New Jersey State Board of Medical Examiners, June 21-22, Trenton. Secretary, E. L. B. Godfrey, M.D., Camden.

Medical Examining Board of Virginia, June 21-24, Richmond. Secretary, R. S. Martin, M.D., Stuart.

State Board of Medical Examiners of South Carolina, State House, Columbia, June 28. Secretary, W. M. Lester, Columbia.

State Medical Society of Pennsylvania, June 28 30, Philadelphia and Pittsburg. Secretary, Isaac B. Brown, M.D., Harrisburg.

Territorial Medical Examining Board of Oklahoma, Guthrie, June 29. Secretary, E. E. Cowdrick, M.D., Enid.

Arizona Board of Medical Examiners, July 4, Phoenix. Secretary, William Duffield, M.D., Phoenix.

Utah State Board of Medical Examiners, July 4, Salt Lake City. Secretary, R. W. Fisher, M.D., Salt Lake City.

North Dakota State Examining Board, July 5, Grand Forks. Secretary, H. M. Wheeler, M.D., Grand Forks.

Board of Medical Examiners of the State of Oregon, July 5-7, Portland. Secretary, Byron E. Miller, M.D., the "Dakum," Portland.

Washington State Board of Medical Examiners, July 5-7, Spokane, Secretary, P. B. Sweringen, Tacoma.

Rhode Island State Board of Health, July 7, State House, Providence. Secretary, Gardner T. Swarts, M.D., Providence.

West Virginia State Board of Health, July 12-14, Point Pleasant. Secretary, Hugh A. Barbee, Point Pleasant.

Indiana State Board of Medical Registration and Examination, July 12, State House, Indianapolis. Secretary, W. T. Gott, M.D., Crawfordsville.

Arkansas State Medical Board of Examiners, July 12, Little Rock. Secretary, J. P. Runyan, M.D., Little Rock.

Connecticut Medical Examining Board, July 12-13, City Hall, New Haven. Secretary, Charles A. Tuttle, M.D., New Haven.

Wisconsin State Medical Board, July 12, Madison. Secretary, F. A. Forsbeck, M.D., Milwaukee.

Board of Medical Examiners of the State of California, July 12, Los Angeles. Secretary, George G. Gere, M.D., San Francisco.

Maine Board of Registration of Medicine, July 12 and 13, City Building, Portland. Secretary, A. K. P. Meserve, M.D., Portland.

Vermont State Board of Medical Censors, July 13-14, Y. M. C. A. Building, Burlington. Secretary, S. W. Hammond, Rutland.

South Dakota Board of Medical Examiners, July 13 and 14, Watertown. Secretary, H. E. McNutt, M.D., Aberdeen.

Board of Medical Supervisors of the District of Columbia, July 14, Washington. Secretary, Wm. C. Woodward, M.D., Health Department, Washington.

Rhode Island April Report.—Dr. Gardner T. Swarts, secretary of the Rhode Island State Board of Health, reports that at the written examination held at Providence, April 7-8, 1904, 70 questions were asked on 7 subjects, and a percentage of 75 was required. All of the seven who were examined passed.

PASSED.

College.	Year Grad.	Per Cent.
University of Vermont	(1903)	76.1
University of Pennsylvania	(1902)	83.8
Harvard University	(1897) 78.6, (1902)	86.1
College of Physicians and Surgeons, Baltimore	(1902)	75.0
Yale University	(1901)	84.1
Boston University	(1900)	77.9

Idaho April Report.—Dr. Robert L. Nourse, secretary of the Idaho State Board of Medical Examiners, reports that at the written examination held at Boise City, April 5 to 8, 1904, 110 questions were asked on 11 subjects and a percentage of 75 was required. Of the 19 examined 9 passed and 10 failed.

PASSED.

College.	Year Grad.	Per Cent.
Rush Medical College	(1903)	78.8
Long Island College Hospital	(1894)	82.0
University of Michigan	(1882)	83.8
Northwestern University	(1902)	77.2
Barnes Medical College, St. Louis	(1900) 85.7, (1903)	76.9
Vanderbilt University	(1898)	75.1
University of Illinois	(1903)	77.6
Detroit College of Medicine	(1895)	78.9

FAILED.

Michigan University	(1883)	63.2
Kansas Medical College	(1895)	59.6
Jefferson Medical College, Philadelphia	(1895)	69.2
Columbus Medical College, Ohio	(1882)	56.9
Missouri Medical College, St. Louis	(1895)	27.2
Central Medical College, St. Joe, Mo.	(1887)	68.6
University Southern California, Los Angeles	(1899)	73.6
Uni. Med. Coll., Kansas City, Mo.	(1898) 68.7, (1897)	53.5
Kentucky University, Louisville	(1904)	73.8

Utah April Report.—Dr. R. W. Fisher, secretary of the Utah State Board of Medical Examiners, reports that at the written examination held at Salt Lake City, April 4, 1904, 125 questions were asked on 20 subjects and a percentage of 75 was required. All of the 7 who were examined passed.

PASSED.

College.	Year Grad.	Per Cent.
Medico-Chirurgical College, Philadelphia	(1902)	85.7, 86.8
Gross Medical College, Denver	(1900)	84.2
Northwestern University, Chicago	(1902)	84.3
Washington University, St. Louis	(1899)	82.3
Illinois Medical College, Chicago	(1904)	90.0
Kentucky School of Medicine	(1903)	82.5

The board has increased the number of subjects so that the requirements are now: Diploma and examination with an average of 75 per cent. on the following subjects: Bacteriology, histology, medical jurisprudence, practice and pathology, pediatrics, chemistry, materia medica, therapeutics, obstetrics and gynecology, diseases of skin, anatomy, surgery, eye, ear nose and throat, hygiene, physiology.

Louisiana May Report.—Dr. Felix A. Larue, secretary of the Louisiana State Board of Medical Examiners, reports that at the written examination held at New Orleans, May 6 and 7, 1904, 50 questions were asked on 10 subjects, and a percentage of 75 was required. Of the 115 candidates, 103 passed and 12 failed.

PASSED.

College.	Year Grad.	Per Cent.
University of the South, Suwanee	(1904)	83.0
University of Nashville, (1904) 88.4, 86.8, 86; (1903) 81.4; (1902) 75.6; (1899) 80.2.		
Louisville Medical College	(1904) 87.4, 79,	75.8
Medical Department, University of Louisville	(1904)	81.6
Vanderbilt University of Nashville, (1904) 79.6; (1901) 90.0; (1890) 78.6; (?) 85.2.		
Harvard Medical College	(1898) 85; (1893)	83.4
McGill University	(1902)	92.8
Tulane University, (1904) 87.2, 89.2, 85.4, 83.6, 83.4, 88.2, 86.4, 95.8, 87.8, 87.4, 93.6, 83, 91.2, 91.4, 89.2, 82.2, 87.4, 86.4, 91.2, 83.2, 84.6, 83.8, 82.8, 83.4, 79.4, 84, 81.2, 91.2, 83, 82.8, 83.6, 85.8, 85.8, 88.2, 84.8, 91, 88.6, 88.2, 77, 83.2, 90.4, 81, 85, 79.2, 79.8, 85.4, 91.6, 89.4, 95.2, 90, 89.8; (1899) 93.		
Memphis Hospital Medical College, (1904) 78.2, 82, 83.8, 84, 84.4, 88.4, 81.6, 85.4, 82.6, 88.6, 81, 83.2, 76.8, 91; (1903) 84.8, 80.8, 77.2; (1902) 86.2; (1896) 81.		
Maryland Medical College	(1904)	78.0
Baltimore Medical College	(1896)	88.6
College of Physicians and Surgeons, Baltimore	(?)	80.6
Bellevue Medical College	(1877)	80.0
Barnes Medical College, St. Louis	(1903)	83.8
Albany Medical College, New York	(1892)	83.6
Atlanta College Physicians and Surgeons	(1904)	77.0
University of Pennsylvania	(1893)	85.8
Boston College Physicians and Surgeons	(1903)	85.4
Flint University, New Orleans, (1904) 88.6, 79.6; (1903) 75.8,		75.4
Walden University, Nashville	(1903)	75.4

FAILED.

University of the South, Sewanee	(1904) 73.6,	72.2
University of Nashville	(1896)	62.4
Kentucky University	(1903)	62.8
Kentucky School of Medicine	(1898)	53.6
University of Tennessee	(1904)	71.0
Memphis Hospital Medical College, (1904) 71.6, 45; (1899)		62.4
Flint University, New Orleans	(1904) 60.4; (1902)	53.0
New Orleans University	(1900)	60.2

Minnesota April Questions.—The Minnesota State Board of Medical Examiners, at the April, 1904, session, asked the following questions:

HISTOLOGY AND PATHOLOGY.

1. Give pathology of kidney in chronic interstitial nephritis. 2. How would you make a Widal's test? What is its value in diagnosis? 3. Name varieties of tapeworm found in man, and give usual source of infection of each. 4. Name the different varieties of leucocytes and give the proportion of each in normal blood. 5. Explain the difference between active and passive congestion. 6. How would you make a bacteriologic diagnosis of diphtheria? 7. What are the vital manifestations of a cell? 8. How does a peptic gland differ in structure from a pyloric gland? 9. Describe a nerve cell. What is meant by a bipolar cell? 10. What form of epithelium occurs in the following organs: Lungs, urinary bladder, stomach, ureters, oviduct, vas deferens, cornea?

MATERIA MEDICA AND THERAPEUTICS.

1. What is the strength in arsenic of Fowler's solution? Of opium in paregoric? Of ipecac and of opium in Dover's powder? 2. Prescribe salicylate of soda for an adult at the beginning of a sharp attack of acute articular rheumatism. 3. Name the three principle antipyretics of the coal-tar series and the adult dose of each. 4. Write a formula for a laxative pill containing aloes and podophyllum for an adult. 5. Criticise this prescription:

℞. Zinci sulphatis.
Plumbi acetatis, of each ..... gr. xxx
Aquæ rosæ ..... ʒvj
M.:

6. How would you use antitoxin in the early stage of a severe attack of diphtheria in a child 6 years old? 7. Prescribe an ointment for a case of scabies. 8. Give the average adult dose of each of the following: extract of nux vomica; bichlorid of mercury; oil of sandal wood; extract of hyoscyamus; tincture of opium. 9. Prescribe iodid of potash for an adult suffering from a syphilitic ulcer of the leg. 10. What precautions are necessary in prescribing tincture of the chlorid of iron? Why?

HOMEOPATHIC MATERIA MEDICA.

1. Differentiate between aconite, belladonna and arsenic in fevers. 2. Give prominent symptoms of baptisia, rhus and bry, which indicate them in typhoid fever. 3. Give characteristic symptoms of lycopodium. 4. Give characteristic symptoms of digitalis cactus and spigelia in heart affections. 5. Give a picture of child in whom calcarea carb. is indicated. 6. Give prominent symptoms of gels. 7. Name four remedies having special action on the female generative organs. 8. Give four remedies of use in diarrhea with their most characteristic differential symptoms. 9. Name three remedies of service in follicular tonsillitis. 10. What conditions indicate hypericum arnica; rhus tox. in injuries?

ECLECTIC MATERIA MEDICA.

1. Give the use of lobelia in eclampsia; of veratrum; and dose of each. 2. Give the indications for the use of bryonia and rhus tox. What are their physiologic actions? 3. What is acetanilid? Give physiologic action. 4. Name some of the later alkaloids of opium and the dose of each. 5. Give use and dose of Jamaica dog-wood; chloral hydrate; trional; sulphonal; cannabis indica. 6. Give physiologic action of ergot; digitalis; gelsemium. 7. What are the specific indications for chamomile; nux vomica; ipecac; hydrastis? 8. Name three reliable tonics; three stimulants; three sedatives. 9. What are the medical properties of turpentine, and how would you give it? 10. Name some conditions calling for collinsonia; sanguinaria and phytolacca.

EYE AND EAR.

1. Otitis media: Pathology, symptoms, treatment. 2. Primary glaucoma. Symptomatology, treatment. 3. Surgical removal of eye. When? How? 4. Discuss. (*a*) Care of eyes of new born. (*b*) Care of eyes of school children. 5. What eye and ear complications would you be on the lookout for, and what prophylactic measures would you accordingly take in the following diseases: (*a*) Measles; (*b*) scarlet fever; (*c*) diphtheria.

SURGERY.

1. Give diagnosis and treatment of hip-joint disease. 2. Diagnosis and treatment of gastric ulcer. 3. Give treatment for tubercular cervical glands. 4. Give treatment of hemorrhoids. 5. Diagnosis and treatment for strangulated inguinal hernia. 6. Treatment for gunshot wound of abdomen where bowel has been penetrated. 7. Diagnosis and treatment for compound fracture of femur. 8. Treatment for fractured clavicle. 9. Give treatment for dislocation of knee joint. 10. Give treatment for lacerated and contused wounds in general.

MEDICAL JURISPRUDENCE.

1. Before beginning an autopsy in a medicolegal case, what points are to be noted? 2. State the principal differences between the adult male and the adult female skeleton. From the skeleton alone can a positive opinion be formed as to the sex? 3. What is the greatest possible duration of a pregnancy that may result in the birth of a living child? 4. What conditions influence the time of appearance of rigor mortis? 5. What is the minimum fatal dose in an adult of arsenious acid? Of sulphate of morphia?

DISEASES OF WOMEN.

1. Movable kidney: Define and give etiology, symptomatology, prognosis and treatment. 2. Neoplasms of the ovaries: Give the two classes and the varieties in each class. 3. Describe Emmet's operation for restoration of the pelvic floor in incomplete laceration of the perineum. 4. Cysts of Bartholin's gland. Etiology, symptomatology and treatment. 5. Pudendal hematocele, causes, symptoms, treatment.

DISEASES OF CHILDREN.

1. Scorbutus: Etiology, lesions, symptomatology and treatment. 2. Chronic intestinal indigestion: Etiology, symptomatology, diagnosis and treatment. 3. Anuria: Etiology, symptomatology and treatment. 4. Acute diffuse nephritis: Etiology symptomatology, diagnosis and treatment. 5. Epilepsy: Symptoms and treatment.

ANATOMY.

1. Describe the atlas. 2. Into what classes are articulations divided? 3. Describe and give origin and insertion of the pronator radii teres muscle. 4. Describe the abdominal aorta, giving its use and termination. 5. Name the principal veins of the head and neck. 6. Give characteristics of lymphatics; where are they not found? 7. Name the membranes of the brain. Give brief description of each. 8. Give brief description of the spinal cord. Give only its gross anatomy. 9. Name the openings into the pharynx. 10. Give gross anatomy of the liver.

PHYSIOLOGY.

1. Name one property common to all blood leucocytes and give some of their physiologic uses. 2. What is lymph and its mode of reaching the lymphatic vessels and glands, and, finally, the venous circulation? 3. Tell something concerning cerebral localization, describing any three local centers. 4. Give origin and function of anterior and posterior roots of spinal nerves. 5. What is the composition, reaction and function of the pancreatic juice? 6. Give normal constituents of arterial blood, and the process by which venous is converted into arterial blood, and the physiologic necessity therefor. 7. Give nature of function performed by kidney and detail with some minuteness the method of its performance. 8. What is the physiologic difference between striated and non-striated muscular tissue, giving some examples of each. 9. Describe the portal circulation. 10. Give normal constituents of urine, and amount voided (approximately, in ounces) in 24 hours.

THEORY AND PRACTICE.

1. Give physical signs of pleuritic effusion. 2. Describe sonorous, sibilant, crepitant and mucous râles. 3. Give causes and diagnosis of gastric ulcer. 4. Give etiology and symptoms of cerebral embolism. 5. Name the chronic diseases of the liver. 6. What do you understand by enteroptosis, and what are the common pathologic conditions involved? 7. Name six chronic diseases most likely to be associated with a daily rise of temperature. 8. What is the difference between intermittent and remittent fever? 9. Give differential diagnosis between chronic parenchymatous nephritis and chronic interstitial nephritis. 10. Give the normal location of the apex beat of the heart, and give diagnostic significance of its various displacements.

CHEMISTRY, URINALYSIS AND TOXICOLOGY.

1. Define base, salt, acid. 2. Hydrochloric acid, composition, physical properties. 3. Mercury: Physical properties, preparations. 4. Arsenical poisoning: Symptoms, treatment, postmortem findings. 5. Urine analysis: (*a*) Name causes of high specific gravity. (*b*) Name most important constituents of normal urine.

OBSTETRICS.

1. What are the anatomic differences between the male and female pelvis? Give diameters of superior strait of female pelvis. 2. How do you differentiate a vertex from a breech presentation? 3. What are the dangers of a breech presentation? Describe your method of management. 4. What is eclampsia? Causes. Treatment. 5. What is the significance of ante-partum hemorrhage? Give treatment. 6. How do you manage a face or brow presentation? 7. What means do you employ to guard against rupture of the perineum? Treatment if ruptured? 8. What other causes beside a non-contraction of uterus may give hemorrhage following labor? 9. What is "Ophthalmia"? Give treatment, preventive and curative. 10. On which side do you place the new-born babe? Is there any scientific reason for a choice of sides.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Acute Bronchitis.

In considering the treatment of bronchitis, according to *Canad. Prac. and Rev.*, it is necessary to bear in mind the etiology of the disease, such as irritating vapors, a cold east wind, Bright's disease, cardiac lesions or some acute infectious disease.

The treatment necessarily varies with the stages. When there is soreness in the chest and scanty sputa, pain on coughing, the bronchial tubes inflamed and congested, warm moist air has a soothing effect on the membrane and counteracts the dryness. A steam kettle and a tent bed often give relief. Warm liquid food should be given, as swallowing hot fluids has a reflex act on the bronchi and aids the expectoration by increasing the flow of mucus. Hot poultices or fomentations to the chest and back make the patient more comfortable. In other cases stimulating liniments, such as those containing turpentine and acetic acid, may be preferred. Internally a mixture similar to the following may be given:

℞.	Ammon. carb.		
	Pot. iodidi, āā	gr. iii	20
	Sol. ammon. acetat	℥ii	8
	Aq. camphoræ	℥i	30

M. Sig.: The entire amount to be taken once in four hours; or:

℞.	Vini ipecac.		
	Tinct. scillæ, āā	m. x	65
	Spts. etheris nit.	℥ss	2
	Aq. chloroformi	℥i	30

M. Sig.: At one dose and repeat every four hours.

The effect of the iodid is to thin the mucous secretion and render the act of expectorating less difficult. If it is desired to add potassium iodid to the latter mixture it is necessary to add an alkali, as ammonium carbonate, to neutralize the slight acidity of the nitrous ether.

In aged individuals there is frequently a tendency to heart failure, so that alcohol or strychnia may be in demand or the following mixture may be of service in such cases:

℞.	Spts. etheris sulph.		
	Spts. ammon. arom., āā	gtt. xv	1
	Syr. aurantii	℥ss	2
	Aq. camphoræ	℥i	30

M. Sig.: One such dose every four hours.

If necessary a few drops of the tincture of digitalis may be added to the foregoing combination.

A brisk purgative is often necessary as the initial treatment in this trouble, which may be Carlsbad salts, Seidlitz powder or calomel, given in one large dose. Sedatives must be given with care. During convalescence, after the cough has loosened up, these stimulating expectorants may be discontinued, and in their stead an acid tonic may be given, such as the following:

℞.	Acidi nitrici dil.	gtt. x	65
	Tinct. nucis vom.	gtt. v	30
	Spts. chloroformi	gtt. x	65
	Infus. gent. co.	℥i	30

M. Sig.: One such dose to be taken after each meal; or:

℞.	Tinct. cinchonæ	m. xx	1 30
	Acidi nitrici dil.	m. x	65
	Syr. aurantii	℥i	4
	Aq. chloroformi	℥i	30

M. Sig.: One such dose after each meal.

In some cases quinin is indicated, in others some preparation of iron. In children a compound syrup of the phosphate of iron is useful. Malt extract and cod-liver oil are also of service.

Antimony is sometimes of service in cases of acute bronchitis, according to Yeo, especially if administered early in the disease, when the bronchial mucous membrane is dry and tumid, before the secretion has become abundant and when the skin is hot and dry and the pulse hard. It should be given, according to the author, in small and frequently repeated doses, combined with other diaphoretics. Ten to twenty minims (.65-1.30) of the wine of antimony may be given to adults, and five to ten minims (.30-.65) to children. It can be combined with other diuretics as follows:

℞.	Vini antimonialis	℥ii	8
	Spts. etheris nitrosi	℥iv	15
	Liq. ammon. acetatis	℥ii	60
	Tinct. camphoræ co.	℥ii	8
	Aquæ q. s. ad	ℨviii	240

M. Ft. mistura. Sig.: Two tablespoonfuls every three or four hours.

The following combination is also recommended by this author as a suitable combination in acute bronchitis:

℞.	Infusi senegæ	℥iv	120
	Ammon. carb.	gr. xxx	2
	Tinct. scillæ	m. lxxx	5
	Spts. chloroformi	℥ii	8
	Aquæ q. s. ad	ℨviii	240

M. Sig.: Two tablespoonfuls every four or five hours.

In debilitated individuals, when the earlier stages are not encountered, the following is recommended:

℞.	Ammon. carb.	gr. xl	2 65
	Vini ipecac.	m. xl	2 65
	Tinct. cinchonæ	℥iv	15
	Aquæ chloroformi q. s. ad	ℨviii	240

M. Ft. mistura. Sig.: Two tablespoonfuls every four hours.

In advanced rheumatic or gouty cases when the expectoration is tenacious and difficult to expel, the potassium iodid is indicated, combined as follows:

℞.	Pot. iodidi	gr. xxxv	2 | 30
	Sod. chloridi	ʒi	4 |
	Ammon. carb.	ʒss	2 |
	Sodii bicarb.	gr. xl	1 | 65
	Tinct. senegæ	ʒiii	12 |
	Aq. chloroformi q. s. ad	ʒiv	120 |

M. Ft. mistura. Sig.: One or two tablespoonfuls four times daily.

The following combinations are recommended by *Merck's Report* as of service in bronchitis:

℞.	Syr. picis liquidæ	ʒi	30 |
	Syr. pruni virg.		|
	Syr. tolutani, āā	ʒiss	45 |

M. Sig.: One teaspoonful every three hours; or:

℞.	Ext. marubii flu. (horehound)	ʒss	15 |
	Syr. tolutani	ʒi	30 |
	Syr. picis liq.	ʒvi	24 |
	Syr. glycyrrhizæ	ʒvi	24 |

M. Sig.: One teaspoonful every three hours.

Arteriosclerosis.

The following combination is recommended by Huchard, in *Clin. Ther.*, in the treatment of arteriosclerosis:

℞.	Sodii iodidi	ʒi	4 |
	Sparteinæ sulph.	gr. xv	1 |
	Pulv. glycyrrhizæ q. s.		|

M. Ft. cap. No. xl. Sig.: Four to six daily.

Aneurism.

The following combination containing iodids and bromid is recommended in the treatment of aneurism:

℞.	Pot. iodidi		|
	Sodii bromidi, āā	ʒii	8 |
	Syr. aurantii flor.	ʒiv	15 |
	Aquæ q. s. ad	ʒvi	180 |

M. One tablespoonful three times daily.

For the cough in aneurism the following is advised:

℞.	Morphinæ hydrochlor.	gr. i	| 06
	Acidi hydrochlor. dil.	m. v	| 30
	Acidi hydrocyanici dil.	ʒss	2 |
	Syr. scillæ		|
	Aquæ, āā	ʒi	30 |

M. Sig.: One teaspoonful as necessary; or:

℞.	Syr. scillæ	ʒii	8 |
	Spts. lavendulæ co.		|
	Tinct. opii camph.		|
	Syr. simplicis, āā	ʒiv	15 |
	Aq. menth. pip.	ʒii	60 |

M. Sig.: One tablespoonful every three hours.

To relieve the pain and restlessness the following:

℞.	Morphinæ hydrochlor.	gr. 1/4-1/3	| 015-.020
	Spts. etheris sulph.	ʒss	2 |
	Aq. menth. pip. q. s. ad	ʒi	30 |

M. Sig.: At one dose and repeated according to instructions.

And to relieve the neuralgia, which is usually a constant symptom in aneurism, the following liniment is recommended:

℞.	Ext. belladonnæ	ʒii	8 |
	Ext. opii	ʒi	4 |
	Spts. vini rect.	ʒss	2 |
	Glycerini	ʒss	15 |

M. Ft. linimentum. Sig.: To be applied to the painful area.

Gastric Ulcer.

Woodville, in *Ther. Rev.*, recommends bismuth subnitrate, as originated by Fleiner, in large doses in the treatment of gastric ulcer. Fleiner administered from 45 to 120 (3.-8.) grains through the stomach tube. Woodville does not recommend the stomach tube on account of the danger of perforation. His treatment consists in a diet of small quantities of milk and a little albumin ordered at intervals of three or four hours. If other nourishment is needed it should be given per rectum. He gives the bismuth subnitrate suspended in one glass of milk three times a day, and continues the treatment for three weeks without interruption. Bismuth thus given in this manner arrests the vomiting, and forms a protective coating over the ulcer, and in this way permits the process of repair to go without interruption. Cathartics should never be given by the mouth. The bowels should be kept open by enemas. Toxic symptoms do not occur.

Medicolegal.

Damages for Scalds.—The Court of Civil Appeals of Texas says, in Houston & Texas Central Railroad Company vs. Bulger, a personal injury case brought by the latter, that the evidence showed that the plaintiff, a boy about 13 years of age, was severely scalded on both legs, on one extending from the upper third of the thigh to the heel; that he suffered the most intense pain for over three months; that the burns did not permanently heal until the next December following the date of infliction, which was March 8; that the skin proper on the right leg, and in patches on the left, was destroyed; that, in healing, the scars had contracted on the blood-vessels, and the pressure interfered with the circulation of the blood, and would probably cause varicose veins and trouble in after life. Under these circumstances, the court does not think that it could be said that a verdict for $4,000 damages was excessive.

Proper Expert Evidence of Capacity in Rape Case.—The Supreme Court of Kansas says that, in the case of State vs. Walke, a prosecution for statutory rape, the accused was a man 68 years old. His wife testified that he had lost virility to the extent that he was incapable of having sexual commerce with a woman. This she knew from her intimate relations with him. On rebuttal physicians were called, and permitted to testify as experts that a man of that age, having lost sexual desire as to his wife, might still have such desire and ability to consummate it on other and younger women. The court finds no error here. The question involved, it says, was not one so clearly falling within the range of common experience and observation as to exclude expert evidence in proof of the same, nor that the jury might surely assume its truth without the evidence of an expert. Expert evidence is admissible in proof of matters not clearly falling within the range of common experience or observation.

Liability for Expenses to Check Contagious Diseases.—The Supreme Court of Minnesota holds, in the case of Comstock vs. Board of Commissioners of Le Seuer County, that Section 29, Chapter 132, page 185, of the General Laws of that state of 1883, making towns, boroughs, and villages liable in the first instance for all expenses incurred by their boards of health, acting under the provisions of that statute, in efforts to control and prevent the spread of infectious and contagious diseases, was amended and repealed by subsequent legislation, so that in 1901 the county in which the town, borough, or village is situated was solely liable for all such expenses. The town, borough or village was not during that year liable for such expenses, primarily or otherwise. It says, further, that it is probable that the primary liability of towns and villages is restored by the act of 1902, but that it does not attempt to construe that act in this case, its provisions having no application here on account of its having been passed after the transaction involved in this case was closed.

Physician Not Competent Witness to Sustain Certificate.—The Supreme Court of New York, trial term, Chenango County, says that in the case of Becker vs. Metropolitan Life Insurance Company, the company claimed that the insured had an attack of cerebral apoplexy and was treated therefor prior to the time that he applied for insurance, but that the facts were concealed from the company's agent at the time of making the application for insurance. The plaintiff, who was seeking to recover the insurance, put in evidence the application, the policy, and the proofs of death, which showed, on their face, that the plaintiff was not entitled to recover. The physician's certificate of death showed the previous illness, on which, with a statement in the plaintiff's affidavits, the company sought to make its defense. The court holds that the

plaintiff had the right to show that the statements in the certificate were not true; and that, having explained and shown the untruthfulness of the physician's certificate, the physician had no right to take the stand for the purpose of sustaining the certificate and contradicting the beneficiary, under the statute with regard to privileged communications, he having acquired his information in the capacity of an attending physician.

Opinion Evidence as to Cause of Physical Condition.—The Supreme Court of Wisconsin says, in the personal injury case of Lyon vs. City of Grand Rapids, that a question was allowed to a physician, called to give opinion evidence, as to what caused a particular diseased condition of the plaintiff, which he testified she was suffering from, basing such opinion on the assumption that she had testified truthfully, and what he had seen of her from time to time, including that discovered on his examination of her person as her physician. The question was objected to as incompetent. It was not controverted, but that it was permissible for the expert to give opinion evidence as regards whether such condition was caused by violence of some kind applied to the plaintiff's person, or by some other immediate producing cause not going to the circumstance which set such cause in motion. The books are full of instances of opinion evidence of that character. Whether an injury of the kind in question is sufficient to produce the particular effects alleged to have been caused thereby is a proper subject for expert evidence. For the purpose of interrogating an expert as to whether a particular condition of the human system found to exist at a particular time is referable to violence, blood poisoning, or some other immediate producing cause, the form of the question is often that adopted in this case. "What, in your opinion, is the cause of the condition which you discovered?" or, on the hypothesis that the physical condition of the person is as stated in the question, the expert is commonly asked to give his opinion as to the cause thereof, meaning thereby, generally, the immediate cause. That is about as far as opinion evidence should be permitted to go other than under exceptional circumstances, which strictly exclude any other producing cause than the particular one involved in the controversy. In such cases questions have been permitted which seem to invade the salutary rule that the expert is not to be permitted to usurp the functions of the jury by passing on issues to be submitted to them. In Maitland v. Gilbert P. Co., 97 Wis., 476, and Daly v. Milwaukee, 103 Wis., 588, it was said, in effect, that so long as the opinion of the expert is based on undisputed facts or an assumed state of facts warranted by the evidence in some aspect thereof, and is kept within the field of scientific knowledge, the question calling therefor is not necessarily objectionable because the tendency of the answer is to pass on some ultimate question to be submitted to the jury for final solution. However, that is somewhat dangerous ground. The safer way is to go no further than to show by the opinion evidence that the particular circumstances proved or assumed are a sufficient producing cause for the effect complained of. No definite rule can be given accurately defining the limits to which such questions can go. The discretionary authority of the trial judge in that field is somewhat broad. It must necessarily be exercised with regard to the particular facts of the case in hand. Any attempt to give a rule more definite than the one commonly given, that is, that the opinion evidence must not be permitted to extend to the merits of the controversy, passing on the very question, or one of them, to be submitted to the jury, or to go outside the field of scientific knowledge, would not improve it. Of course, when that rule is analyzed, as will be discovered by examining the opinion in Maitland v. Gilbert P. Co., the term, "pass on the controversy to be submitted to the jury," means pass on some disputed evidentiary matter on which the final result in whole or in part depends, or pass on some matter not within the scope of scientific knowledge. In attempting to harmonize the adjudications on the subject found in the books, one soon discovers that courts have applied the principles stated so variously that the function of expert testimony and that of the jury many times appear to so blend that the best experts in the science of the law can not discover where the one ends and the other begins. It would seem that opinion evidence should be sufficiently restrained that such will not be the case, and it is believed that as regards the cases decided in this court that has, generally speaking, been done. It is easy to understand that opinion evidence should be kept within the field of scientific knowledge; also that whether the particular conditions of the human system might be produced by a particular physical disturbance, or whether it was or might be produced by a particular immediate cause, is within such field; but not, generally speaking, easy to see that whether a particular physical disturbance as to one person, attributable to actionable fault of another, is the cause of the bodily condition of such person, the immediate cause of which is to be sought for by scientific knowledge.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.

May 28.

1 *Empyema. De Forest Willard.
2 Experimental Pancreatitis Considered in Its Relation to the Acute Forms of Pancreatitis in Man. Richard M. Pearce.
3 Acute Anterior Poliomyelitis in Adults, with Report of a Case in which There Was Also a Peripheral Facial Palsy and Paradoxic Pupils Complicated with Hippus. Alfred Gordon.
4 *Neuritis as a Complication of Some Portion of the Childbearing Process. William R. Nicholson.
5 Clinical Report of a Case of Lithogenous Icterus. Byron Robinson.
6 Posterior Gastroenterostomy, with Entero-enterostomy: a Study of Conditions Found at Autopsy. W. L. Wallace.
7 Observations on the Duty of the Physician to His Patient Through the Surgeon. Henry Sewall.
8 Santa Cruz Mountains of Jamaica, West Indies, for the Tuberculous. Logan Russell and Leslie Alexander.

1. **Empyema.**—Willard remarks that the condition is very often unrecognized, and gives certain diagnostic points that are of value. His general summary of conclusions is stated as follows:

1. Early diagnosis of pleurisy and early operations are the prime elements in the avoidance of empyema. The general practitioner is the one who needs to be on the alert.
2. A test for fluid should be made with the aspirating needle, not a hypodermic, as the latter is too small and short. Liquid, if present, should be immediately withdrawn; if purulent, further operation within a day or two is advisable as soon as the lung expands and the heart moves toward its normal position. Aspiration should be limited to diagnostic purposes, to the withdrawal of serum, and as a preliminary operation in empyema.
3. In all cases of pyothorax, free drainage, not aspiration, should be the rule. The larger the openings the quicker will cure be effected. Resection of ribs is imperative for exploration by the finger and for removal of fibrinous masses.
4. Washings are counterindicated, except in fetor, and even then more perfect drainage is indicated rather than irrigation.
5. In old chronic cases with contracted lung and degenerated pleura, more or less excision of the chest wall and pleura should be performed, even to the excision of the entire extent of all the ribs.
6. Even in tuberculous empyema, benefit is derived from thorough drainage.

4. **Neuritis from Childbearing.**—Nicholson calls attention to the occurrence of neuritis after delivery, and reports two cases, discussing the causes of the condition, such as sepsis, pressure, etc., and points out that symptomatology may vary widely. The time of onset may be in the latter part of the pregnancy, during labor or at any time for several weeks afterward. The symptoms vary from transient pain similar to rheumatism to a symptom-complex resembling acute ascending paralysis or myelitis. The usual type is intermediate between these extremes. The nerves involved in the milder cases are the median and ulnar, or, if the leg is affected, the sciatic, gluteal and especially the external popliteal causing the presence of so-called foot-drop. In very severe cases every portion of the body is involved. He thinks that the milder cases often pass undiagnosed, the patient having been hardly aware of the symptoms that existed.

New York Medical Journal.

May 28.

9 The Construction of the Valvular Part of the Aorta and the Significance of Its Elastic and Collagenous Tissue. Fritz Schwyzer.
10 *Examination of the Bladder in 20 Cases of Ventral Suspension. Swithin Chandler.
11 *The Surgery of Nephritis. (Concluded.) George M. Edebohls.
12 *A New Method to Facilitate Operations in the Mouth, for the Purpose of Minimizing the Danger of Aspiration of Blood During General Anesthesia. Alfred W. Herzog.

13 What Should the General Practitioner Know of Ophthalmology? H. H. Seabrook.

10. **Ventral Suspension.**—Chandler reports the result of an examination of twenty cases of ventrosuspension to demonstrate the incorrectness of the idea of the necessity of bladder troubles after operation. While he says that his series of cases is too small to admit of positive conclusions, they are sufficient, he thinks, to warrant him in the following deductions:

1. In all cases requiring ventral suspension the bladder should be thoroughly examined by a cystoscope.
2. In no cases reported among this number was there any trouble with frequent micturition after the operation of ventral suspension, except where there was some evidence found which would cause such disturbance.
3. The new position of the bladder after ventral suspension aided and relieved, rather than caused, frequent micturition.
4. The said operation may have caused this relief by removing pressure from the neck of the bladder, which pressure undoubtedly helps to cause frequent micturition.
5. The left ureter opening and surrounding parts were often affected, but the cases are too few to state positively why this existed in these cases.
6. Immediate and prompt treatment saves much suffering and adds much to the surgeon's reputation and to that of the operation.
7. By examining the bladder and surrounding parts we may find cases in which suffering may be relieved, when for some reason an operation for uterine disease can not be performed.
8. To make such examination eliminates errors, and is more scientific; and the more exact we become the firmer ground we tread.

11. **Surgery of the Kidney.**—Edebohls points out the indications for renal decapsulation, as well as the contraindications as he understands them. The three conditions are: 1, A clear and unequivocal establishment of the presence of chronic Bright's disease; 2, absence in most cases of contraindications to any operation, and 3, the possibility of securing the services of a competent surgeon in this particular branch. The diagnosis of chronic Bright's disease can hardly fail, with care. Edebohls holds that the form of nephritis does not enter into the question of indication or contraindication. Good results, he says, can be obtained from operation in all varieties. He gives his own experience. As regards age, he has performed decapsulation on 9 patients who were 50 years of age or over; 3 of the 9 died within a week of the operation, 3 died after a longer period of time, and one three weeks after the operation, one in ten and a half months after operation, and one five and a half months. Only 2 of the 6 patients were benefited by the operation. Disorders of the heart are also of importance, but he has observed the cardiac symptoms to entirely disappear as a result. There is one cardinal point that should guide us in advising for or against decapsulation for chronic Bright's disease in the presence of cardiac derangements, especially enlargement of the heart and degeneration of the heart muscle. It is the fact as to whether the compensation of whatever lesion may be present is sufficiently good to warrant the assumption that the patient will safely stand the anesthesia. The most ominous single auscultatory sign of predominant dilatation of the heart and danger of sudden death is, in his opinion, insufficiency of the aortic valve shown by an intermittent aortic regurgitant murmur, occurring every third, fourth or fifth beat, or less frequently. If this condition is present and can not be relieved, the patient is very near the end of life, and he advises against operation. The presence of albuminuric retinitis is another contraindication. While he does not say it is absolute in cases of young persons, he would very carefully weigh all the facts before advising it. More experience is required before the last word can be said. The advantages of having a surgeon who thoroughly understands the method are obvious, and the success of the procedure will largely depend on this. He describes his technic, which is not especially changed, excepting that he now advises to always anchor the decapsulated kidney to the dorsal muscles. Another point is the necessity of securing healing by first intention to obtain the best results. Nephritics do not stand suppuration well. He strongly argues for the value of the operation in suitable cases.

12. **Mouth Operations.**—Herzog suggests in order to avoid the aspiration of blood during general anesthesia in mouth operations, the use of an intubator connected with a rubber tubing through which the patient can breathe, the larynx being thus fairly occluded from any accident of aspiration of blood, etc. The patient, he says, will breathe through the rubber tubing, and the anesthesia can be administered in this way as easily as through a tracheotomy tube.

Medical News, New York.

May 28.

14 *Some Notes on Vocal Fremitus. William N. Berkeley.
15 *Results in Diffuse Septic Peritonitis Treated by the Elevated Head and Trunk Position. Russell S. Fowler.
16 Two Appliances to Facilitate Eye and Throat Work. Edward B. Coburn.
17 A Study of the Tuberculosis Problem in New York City. James A. Miller.
18 A Remarkable Case of Gastric Cancer: Separate Involvement of Cardia and Pylorus: Gain of 35 Pounds in Weight Within Three months of Death. G. W. McCaskey.
19 Postpartum Tubo-ovarian Abscess Causing Hydronephrosis. A. Ernest Gallant.
20 *Ethyl Chlorid as a General Anesthetic. A. F. Erdmann.

14. **Vocal Fremitus.**—Berkeley points out some of the peculiarities of vocal fremitus, especially those which indicate pathologic conditions. The usual excess of fremitus on the right side may be lacking. Ordinarily palpable vibration obtained by putting the four fingers transversely and snugly over the larynx is generally four or five times as great as the right subclavicular fremitus. If this latter becomes for any given case widely variant from this ratio, the condition is pathologic. When the fremitus is equal on both sides, Berkeley considers in ninety-nine cases out of a hundred it is pathologic. The statement made in text-books that vocal fremitus is less than normal in vesicular emphysema is, he thinks, incorrect.

15. **Peritonitis.**—Fowler advocates the elevated head and trunk position in the after-treatment, showing its value by statistics. The salient points in the treatment of these cases are given by him as follows:

(1) A small incision and the avoidance of eventration; (2) thorough cleansing of the primary focus of infection and removal of the appendix. (3) Evacuation and cleansing of all accessory abscess cavities and the pelvis before washing out the peritoneal cavity. (4) A rapid systematic flushing of the peritoneal cavity with peroxid-soda solution followed by hot saline. (5) The continuance of the saline flushing until the sutures are placed, and for the most part tied. (6) The provision of proper drainage for the pelvis either by means of a large glass tube containing a capillary drainage strip emerging through the lower angle of the wound or, in females, by a large caliber rubber tube filled with wicking passed through a posterior colpotomy incision. (7) The drainage of accessory abscess cavities with gauze or wicking. (8) The elevation of the head of the bed to accelerate the drainage of septic fluid into the pelvis where it can be removed through the glass tube or, in case of vaginal drainage, find a ready exit.

20. **Ethyl Chlorid.**—This anesthetic is strongly recommended by Erdmann. It should be chemically pure, given with the proper apparatus and a snugly fitting mask and the dosage carefully regulated. Only two contraindications have been suggested: 1, If the laryngeal aperture is abnormally small, it may be irritated to a stenosis; 2, if kidney disease is present. This latter, however, he does not think a valid objection, as it is not commonly held that the kidney itself suffers harm.

Boston Medical and Surgical Journal.

May 26.

21 Dr. Watson and Mr. Holmes; or the Worm That Turned. J. W. Courtney.
22 *Sulphurous Acid and Its Salts as Food Preservatives as Aids to Frauds, and as Possible Causes of Lesions of the Kidneys. Charles Harrington.
23 Notes on Radium. Francis H. Williams.
24 Vaginal Section in the Treatment of Extra-uterine Pregnancy. Frank A. Higgins.

22. **Sulphites as Food Preservatives.**—Harrington has experimented with the sulphites, sodium sulphite particularly, on cats, and finds that in all the animals except the control one, the kidneys were affected, though the other organs were apparently normal. This substance is largely used as a meat preservative, especially in the popular Hamburg steak, and the necessity of its innocuousness is obvious.

Medical Record, New York.

May 28.

25 The Post-graduate Study of Medicine. D. B. St. John Roosa.
26 The Army Medical Service. Edward L. Munson.
27 The Naval Medical Service. John F. Urie.
28 The Public Health and Marine-Hospital Service. M. J. Rosenau.
29 The Insurance Examiner. Henry H. Schroeder.

30 Salaried Positions Open to Medical Men in the Larger Cities. Henry A. Higley.
31 The Railway Surgeon. William W. Sanford.
32 Medical Service in the Merchant Marine. James Francis Donelly and Frederic Griffith.
33 Professional By-ways Open to Medical Women. Emma E. Walker.
34 Legal Rights and Obligations of the Medical Practitioner. Arthur N. Taylor.
35 State Medical Practice Laws. R. J. E. Scott.

Cincinnati Lancet-Clinic.

May 28.

36 Medical Inspection of Schools. Alfred Friedlander.
37 *The Surgery of Nephritis. J. C. Sexton.

37. **Surgery of Nephritis.**—Sexton considers decapsulation of the kidney a useful and safe treatment, which should be given consideration in every case, but he would not say that the operation is always indicated.

St. Louis Medical Review.

May 28.

38 *Medical Treatment of Appendicitis. Eugene F. Hauck.

38. **Appendicitis.**—Hauck thinks that in many cases appendicitis may be cured by medical treatment, and refers to authorities, especially to a review of the cases occurring in the French army. His own practice is, unless decided symptoms of suppuration are present, to apply ice bags, etc., to the spot. In some very robust persons leeches are applied. Internally he gives ¼ gr. of calomel every hour until the bowels move freely. If needed, a large warm enema of water, repeated if necessary. Opium is given only when the pain is very severe. After all local symptoms have subsided he applies ichthyol externally and occasionally carminatives internally. Only liquid food is given, and none at all for forty-eight hours, with absolute rest in bed for some time, with great care in the diet for several weeks. He has treated a large number of cases, and does not recollect a single instance in which he advised against operation and it became necessary to operate afterward.

Annals of Gynecology and Pediatry, Boston.

May.

39 *Accidental Perforations of the Uterus. D. S. Fairchild.
40 Use in Foreign Countries of Immediate Mechanical Dilatation of the Cervix Uteri. L. M. Bossi.

39. **Accidental Perforations of the Uterus.**—Fairchild shows from various records in the literature and his personal observations that the uterine tissue is capable of being perforated with unexpected ease even in the normal condition, and with much greater ease in certain diseased states. While it has been said that the accident is of small importance and without serious results, this allegation must be qualified by the record of 25 per cent. that have proven fatal. Perforations with a sound properly prepared will generally not be followed by serious consequences. Perforations with a curette are much more dangerous on account of the possible laceration of the uterine tissue in the curetted area. When uterine irrigation is added the danger is greatly increased. The treatment will depend on the nature of the instrument used. In case of criminal abortion, the ignorance or dishonesty of the operator will interfere with the discovery of the condition too often and proper treatment can not be instituted. If the perforation is small and made with a clean instrument and irrigation not employed, rest and the application of ice will generally be followed with recovery with nothing more serious than a circumscribed peritonitis. If irrigation has been employed, one of two courses will have to be followed. If the infection is mild, treatment by rest and ice will be sufficient, but if it is of a character to excite a septic peritonitis, vaginal hysterectomy with drainage will have to be employed. In the milder infection there is the danger of chronic inflammatory processes in the pelvic connective tissue or peritoneum leading to abscess formation and the treatment usually demanded for such conditions. If the perforation is extensive the fundus may be delivered through an anterior vaginal incision, and the wound in the uterus closed by suturing, or the choice will be between suturing the wound or a hysterectomy. Hysterectomy is not often demanded as an immediate operation unless there is some degenerative change of the organ, but it is not good surgery to allow an opening of any size to go unrepaired, not only on account of the danger of infection, but on account of possible hernia and strangulation of the intestine.

American Journal of the Medical Sciences, Philadelphia.

May.

41 *Surgical Importance of the Visceral Crises in the Erythema Group of Skin Diseases. William Osler.
42 *Changes in the Intercostal Muscles and the Diaphragm in Infective Processes Involving the Lung and Pleura. W. M. L. Coplin.
43 A Clinical Report of Three Cases of Injury to the Lower Spinal Cord and Cauda Equina. Theodore H. Weisenburg.
44 *Relation of Typhoid Fever to Tuberculosis. James M. Anders.
45 *Distribution of the Ulcers in Typhoid Fever. Joseph L. Baer.
46 Typhoidal Perforation: With a Report of Eight Cases Subjected to Operation; Two Recoveries. Francis T. Stewart.
47 *Parotitis Complicating Appendicitis. F. E. Bunts.
48 Nasal Syphilitic Tumors. Max Toeplitz.
49 Icterus in Secondary Syphilis. W. J. Calvert.
50 Brief Report of a Case of Spring Conjunctivitis Resembling Malignant Growth of the Corneal Limbus. C. A. Veasey.
51 *Investigation of the Newer Methods for Diagnosing Unilateral Kidney Lesions. M. Krotoszyner and W. P. Willard.
52 Products of Glycolysis in Blood and Other Animal Fluids. A. E. Austin.
53 *The Bacterial Examination of 104 Samples of Water; Together with a Detailed Study of the Colon Bacillus. William G. Bissell.
54 Observations on the Chromatic Variations in the Precipitated and Sedimented Chlorides, Sulphates and Phosphates of Urine. Edward F. Wells and John C. Warbrick.
55 *Experimental Studies on the Etiology of Acute Pneumonitis. Augustus Wadsworth.
56 Hereditary Edema. Arthur W. Fairbanks.

41. **Visceral Crises in Erythema Affections.**—Osler suggests the importance of differentiating these attacks from surgical conditions such as appendicitis, intussusception, etc. He reports cases which point out this necessity. The practical results, he says, to be drawn from the three cases in which laparotomy was performed are: 1. In children with colic the greatest care should be taken to get a full history which may bring out the fact of previous attacks, either of skin lesions, arthritis or intestinal crises. 2. Conduct the most careful inspection of the skin for angioneurotic edema, purpura or erythema.

42. **Changes in the Intercostal Muscles and Diaphragm in Infective Disease.**—Coplin has studied the intercostal muscles in 7 cases; 2 of these were croupous pneumonias with plastic pleurisies, the pneumococcus being isolated from the lung and pleural effusion; 2 were tuberculous lesions of the pleura, and 2 others were cases of acute pneumococcal pleurisies. He found that the muscle fibers showed marked granular change, lack of tingibility or stain reaction; later granular acidophilic deposit around the muscles and interfascicular connective tissue. In the third stage there is a leucocytic infiltration of the muscle similar to that shown by Rohrer. Some fibers appear almost necrosed beside the healthy ones, closely resembling myocardial degenerations of various infectious diseases. There is no difficulty in the identification of organisms that may reasonably be considered pneumococcic. The fourth stage is studied with difficulty unless the patient dies. Small necrotic areas infiltrated by polymorphonuclear leucocytes are really microscopic abscesses. He thinks the tendency would eventually be to a certain degree of muscular sclerosis or a subacute or chronic sclerous myositis. Coplin remarks that the influence of the changes on the thoracic wall are obvious, and a change of respiration must be evident. Such structural alterations in the intercostal muscles possibly clear up the observation that intercostal rheumatism, intercostal neuralgia, etc., are complicating or associated phenomena of pneumonia and pleurisy.

44. **Typhoid and Tuberculosis.**—Anders reports cases of combined typhoid and acute pneumonic phthisis and acute miliary tuberculosis. He points out the importance of the recognition of the condition, the confusion of diagnosis, etc. The Widal reaction may clear up the diagnosis, though often appearing late. A matter of greater clinical importance than to recognize these two disorders when occurring together is the distinction to be made between acute miliary tuberculosis and typhoid and the absence of the Widal reaction, the characteristic eruption and slow pulse of miliary tuberculosis should be especially noted, and a careful search also be made for tuberculosis of the choroid, tubercle bacilli in the blood and

sputum. In doubtful cases attempts should be made to cultivate the typhoid bacillus from any suspicious eruption which may occur. A positive diagnosis, however, is not possible in all cases.

45. **Ulcers in Typhoid.**—Baer has made a careful study of the anatomic position of ulcers in cases at the Cook County and Presbyterian hospitals in Chicago, tabulating and discussing his results. They may involve almost any portion of the digestive tract, excepting the mouth. Involvement of the large intestine was not found in any case in the literature studied, but there were five such cases in the series here reported.

47. **Parotitis Complicating Appendicitis.**—Bunts reports cases; the object of his paper is to emphasize the possibility of the occurrence. The prognosis is generally good. The treatment and prophylaxis are given. The former is the cleansing of the teeth and attention to the buccal cavity. For the latter, hot or cold applications, and where pus is obviously present, evacuation and drainage.

51. **Unilateral Kidney Lesions.**—Krotoszyner and Willard discuss the methods of diagnosing unilateral kidney lesions, and conclude that no one method alone is sufficient. The essential condition, however, is ureteral catheterization, and wherever feasible, catheterization of both ureters. If both urines obtained in this way are subjected to cryoscopy, phloridzin test, urea examination and microscopic examinations, it is possible for us to get a fair idea of the functional value of the kidney and to arrive at safe conclusions as to the intended operative procedures.

53.—See abstract in THE JOURNAL, xli, p. 1293.

55. **Etiology of Pneumonia.**—Wadsworth concludes that under normal conditions the bronchi and lung are practically free from the micro-organism; that the secretions of the upper respiratory tract in both health and disease often harbor the bacteria found in pneumonia, pneumococci, streptococci, staphylococci and pneumonia bacillus; that the incitants of pneumonia may be carried to the lung by the lymph channels, inducing an interstitial pleuropneumonitis or by the blood vessels giving rise to metastatic processes, or as is usual by the air passages, inciting the various lesions of pneumonia.

Archives of Pediatrics, New York.

May.

57 *The Reduction in the Tubercular Death-rate in Children in New York City. Hermann M. Biggs.
58 Polycythemia of Congenital Heart Disease. Ira S. Wile.
59 *Tonsillitis a Cause of Acute Nephritis. John Lovett Morse.

57. **The Tubercular Death-Rate.**—The death-rate of children from birth to 15 years of age in the city of New York during the last twenty years from tuberculosis is analyzed by Biggs, who finds a marked reduction of late years. From the beginning with .60 or .70 per 1,000 of the entire population under fifteen years, it has fallen to a little over 0.30 of 1. He thinks with an extension of the regulations which are now being enforced, with wider diffusion of information as to the nature of the disease and larger facilities for the care of advanced cases, there will be a still further and rapid reduction in the death-rate of this disease in the early period of life.

59. **Tonsillitis as a Cause of Nephritis.**—Morse says this supposition is not irrational. Cases seem to prove it. It is probable that this sequence is more frequent than commonly supposed, and that in many cases considered primary the infection enters through the tonsils; therefore, tonsillitis can not be looked on as a disease of slight importance. A disease that can cause acute endocarditis and acute nephritis is certainly one deserving attention. The heart and urine, therefore, should be examined as carefully as in rheumatism or scarlet fever, and the examinations kept up during convalescence.

The Laryngoscope, St. Louis.

May.

60 *A Bone Forceps for Use in Tympanic Surgery; Its Value in Safe-guarding the Facial Nerve in the Radical Operations for Chronic Suppurative Otitis Media. Philip D. Kerrison.
61 The Question of Intra-nasal Operation on the Frontal Sinus. Beaman Douglass.
62 Leukemia of the Frontal Sinus in a Case with Supernumerary Sinuses in Each Case. Harold Bailey.
63 *Exanthematous Eruptions Following Throat Operations. Louis Fischer.
64 Cholesteatomatous Disease of the Tonsils. Norval H. Pierce.
65 Calculus in Wharton's Duct Complicated by Suppuration, with Involvement of the Submaxillary and Sublingual Glands. M. D. Lederman.
66 Parosmia: with History of a Peculiar Case. Carl E. Munger.
67 Should Specialists Charge Physicians for Services? S. S. Bishop.
68 The Alter-de Vilbiss Spray Stand. Francis Alter.

60. **Bone Forceps.**—Kerrison describes a form of bone forceps in which the cutting is done from within outward. The blades of the forceps cut horizontally by crossed leverage, sliding on each other. He illustrates three sizes, and claims that they possess the following advantages: Saving of time in removing the roof and posterior wall of the meatus and exposing the antrum. Exclusion of the chisel from the tympanic part of the operation and elimination of the danger which is always present in removing with this instrument the inner margin of the posterior superior canal wall which overhangs the facial ridge. Exclusion of the mallet from the tympanic operation and consequent danger of concussion. Diminished danger to the important structures from the fact that the bone is cut in a direction from within outward, that is, away from the stapes, facial canal and external semicircular canal. Increased safety to important structures from the fact that after the preliminary steps of removing the superior and posterior walls of the meatus, the tympanic landmarks are constantly in sight.

63. **Exanthematous Eruptions Following Throat Operations.**—From his study of the subject, Fischer concludes that the infections of measles, scarlet fever, etc., sometimes following throat operations are present before the operation, and that the latter only hastens the disease by shortening the period of incubation in lowering the resistance of the body. This will account for the cases called surgical scarlet fever, etc., which are true cases of the disorder with infection prior to the surgical procedure.

Wisconsin Medical Journal, Milwaukee.

May.

69 *The Scope of Vaginal Section. J. Clarence Webster.
70 Syphilis as a Cause of Psychoses. Richard Dewey.
71 Neurasthenia. H. H. Albers.

69. **Vaginal Section.**—Webster thinks that it is impossible to make any comparison as regards the safety of the vaginal and abdominal operations, but when operation can be performed equally safely and satisfactorily by either route, the vaginal should be selected. He can not protest too much, however, against making it a routine practice. The size of the vagina must always be an important consideration. The conditions in which he thinks the vaginal route may be selected are occasionally in the removal of small myomata and in malignant disease of the uterus, in uncomplicated retroversion of the uterus, inversion of the uterus, etc. Pelvic adhesions can be satisfactorily dealt with only through an abdominal opening permitting covering of the raw surfaces. Diseased ovaries and ovarian cysts may sometimes be removed, but great care should be exercised. The various methods of incision are described, including the author's, for which he claims the advantage of greater movability of the uterus and more room for intrapelvic manipulation.

American Journal of Obstetrics, New York.

May.

72 *Unsettled Questions in Abdominal Surgery. John G. Clark.
73 *The Therapeutic Value of Aseptic Ergot in Anesthesia and Shock. H. Grad.
74 Posterior Introduction of the Forceps. George L. Broadhead.
75 Iodized Catgut. Charles S. White.
76 Floating Liver. D. W. Prentiss.
77 Three Unusual Obstetric Cases. Julius Rosenberg.
78 Intestinal Obstruction Following Laparotomy. W. Sinclair Bowen.
79 A Plea for Early Operative Interference in Cases of Acute Appendicitis, with Report of Cases. J. E. Sadler.
80 *Operative Treatment of Retroversion of the Uterus, with Report of Cases. (Concluded.) Franklin H. Martin.

72. **Abdominal Surgery.**—The questions which Clark thinks should be discussed are whether the normal appendix should be removed in all pelvic operations, and gallstones when discovered. If the right kidney has a range of mobility from 2

to 6 cm., under which circumstances most of them may be easily palpated, what symptoms are pathognomonic enough of a pathologic mobility to indicate nephrorrhaphy? What degree of descent of the stomach and transverse colon requires operative measures for their restoration? Is there a group of symptoms significant of sigmoiditis? In these cases should sigmoidopexy be performed? He would answer these queries as follows:

1. With intelligent patients the question of whether or not the appendix is to be removed should be left to their decision. In the less intelligent class, where the surgeon's judgment must be the guide, I believe the best interests of the patient will be subserved by the removal of the appendix. 2. In every case, unless the patient's condition is a contraindication to any further operation, gallstones, even though they have not produced symptoms, should be removed. 3. Only in instances when the symptoms very directly point to pathologic mobility of the kidney should this organ be suspended as a coincident part of another operation. In my experience the percentage of these cases is not more than one in 150 cases. 4. If the transverse colon is situated at the brim of the pelvis and the lower curvature of the stomach is below the umbilicus, this organ should be replaced and held in position by stitching the gastro-colonic omentum in a transverse line across the upper portion of the abdomen. 5. As to the question of there being a group of symptoms significant of sigmoidtosis, I am as yet in doubt, but I believe that the cases of fixed aching pain at the brim of the pelvis associated with obstinate constipation in the absence of pelvic lesion, are strongly significant of this condition. 6. Although as yet a novel procedure, sigmoidopexy, if only performed in the more exaggerated cases, may offer a hope of correcting this dislocation and relieving symptoms.

73. **Ergot for Shock.**—Grad reports experience with ergot given hypodermically during anesthesia, to combat the nausea and vomiting following, etc. While not wanting to appear too enthusiastic about ergot in nausea and shock, he thinks its use merits attention, and while it may not be prompt in all cases and under all conditions, yet in a very large number of cases it will be of great value in combating the nausea and shock.

80. **Retroversion of the Uterus.**—Martin describes his autoplastic suspension, and gives a summary as follows:

1. A very small percentage of uncomplicated retroversions may be cured by correcting an anterior position of the cervix by lengthening the anterior vaginal wall and shortening antero-posteriorly the mucous membrane of the posterior vaginal vault after the Shucking method. 2. The Alexander operation of shortening the round ligaments is a safe, rational and permanently satisfactory procedure in persistent retroversion in which no pelvic complications exist demanding a peritoneal opening, and should be pursued as a routine operation in such cases. 3. In slight adhesions of the fundus of the uterus with little other pathology to be palpated, a posterior vaginal incision may be made by one accustomed to deep vaginal operation, the adhesions separated and the sacro-uterine ligaments shortened. 4. With slight adhesions present and little pathology to be demonstrated, an anterior vaginal incision is justified in the hands of an experienced operator, provided that he adopts a vaginal round ligament operation for correcting the displacement and never a fixation. 5. When an Alexander operation is contraindicated in a persistent retroversion, because of doubt as to pelvic adhesions or diseased adnexa, it should become a routine procedure to open the peritoneum by a short exploratory incision through the abdominal wall above the symphysis for the purpose of managing the adhesions and diseased adnexa. 6. Some form of simple superficial ventral suspension should be followed as a routine method of retaining the uterus forward in cases where sterility is rendered imperative from the nature of the accompanying procedure, or when the patient has passed the menopause. 7. When the repair of complicating conditions in retrodisplacements requires a laparotomy, but the operative procedure leaves the woman with child-bearing possibilities, a superficial ventral suspension or intra-peritoneal shortening of the round ligaments should be employed to retain the uterus forward. 8. In a small but definite percentage of cases of complicated retroversions where accompanying pathology is such as to cause extensive denudations of the peritoneal covering of the uterus, or where the repair work on the appendages is such as to be liable to lead to dystocia, the surgeon should at once render the patient sterile by amputating the tubes into the horn of the uterus, obliterating them by inversion sutures, and then suspend the uterus. 9. In performing a suspension or an Alexander one important element of danger can be eliminated by substituting for dead permanent suture material my autoplastic methods of securing the suspensory ligaments.

Illinois Medical Journal, Springfield.

May.

81 *Durability of the Therapeutic Effects of High Frequency Currents. W. F. Somerville.
82 Contribution to the Diagnosis and Treatment of the Surgical Diseases of the Ureter and Kidneys. F. Kreissl.
83 *Treatment of the Suppurative Diseases of the Accessory Sinuses of the Nose. E. Fletcher Ingals.
84 *When and When Not to Operate on the Mastoid Bone. H. Gradle.
85 *Symptoms and Diagnosis of the Suppurative Diseases of the Accessory Sinuses of the Nose. Norval H. Pierce.
86 Observations on the Chromatic Variations in the Precipitated and Sedimented Chlorides, Phosphates and Sulphates of the Urine. E. F. Wells and John C. Warbrick.
87 Hypernephroma of Kidney, with Report of a Case. Robert Wallace Hardon.

81. **High Frequency Currents.**—Somerville reports a case of these currents in a number of affections, including sciatica, hemorrhoids, varicose veins, skin disorders, asthma, peripheral neuritis, nervous headache, insomnia, fissura ani and constipation. He thinks that in all these conditions he has had more or less success, and while sufficient time has not elapsed to warrant a permanent cure, they strongly point that way.

83-84-85.—See abstract in THE JOURNAL of April 16, p. 1039.

Journal of the Michigan State Medical Society, Detroit.

June.

88 Obligations of the State to Conserve Life and Health. Wm. F. Breakey.
89 Abdominal Pain. H. E. Randall.
90 Further Experience with Streptolytic (Antistreptococcic) Serum in Rheumatism. George H. Sherman.
91 Subphrenic Abscess—With Report of Case. W. B. Lunn.
92 Hysteria—Certain Manifestations. Guy L. Connor.

Medical Fortnightly, St. Louis.

May.

93 Parasyphilitic Disorders. Archibald Church.
94 Testimonies of Ancient Sepulchres on the Question of Paleolithic Man in the Western Hemisphere—A Contribution to Paleo American Medicine. Albert S. Ashmead.
95 Amputations. Carl E. Black.
96 Arterial Circulation of Infant Uterus One Day Old. Byron Robinson.

Fort Wayne Medical Journal-Magazine.

May.

97 A Clinical Lecture—Double Dermoid of the Ovaries with Torsion of the Pedicle of the Left—Celiotomy. Miles F. Porter.

Virginia Medical Semi-Monthly, Richmond.

May 13.

98 A Consideration of Some of the Methods to Be Pursued in the Diagnosis of the Diseases of the Rectum and Anus from the Standpoint of Their Practical Importance to the General Practitioner. Lewis H. Adler, Jr.
99 Should the Country Doctor Attempt Big Surgery? Thomas D. Burgess.
100 Circular Craniotomy. D. Percy Hickling.
101 Chorea and Anemia. Boshier W. Miller.
102 Reports of Cases (1) Strangulated Hernia; Operation; Recovery. (2) Hepatic Abscess—Operation—Retention of Drainage Tube—Removal—Recovery. J. N. Fogarty.
103 Management of Acute Mania. J. W. P. Smithwick.
104 The Diagnosis of Diphtheria. F. K. T. Warrick.

Proceedings of the Pathological Society of Philadelphia.

April.

105 A Résumé of Literature Relating to Serum Diagnosis. Randle C. Rosenberger.
106 Sarcoma of the Bladder and Prostate Gland Causing a Cyst of the Urachus and Bilateral Hydronephrosis in a Nine-month-old Baby. G. McConnell.
107 Case of Spontaneous Arrest of Growth in an Endothelioma, with Subsequent Inflammatory Absorption. B. M. Randolph.

Pacific Medical Journal, San Francisco.

May.

108 Elephantiasis. Winslow Anderson.
109 The Cure of Consumption by Feeding the Patient with Subcutaneous Injections of Oil and Its Digestion by the White Globules of the Blood. Thomas B. Keyes.
110 Physical Culture. H. M. Hill.

Buffalo Medical Journal.

June.

111 The Scholar in Professional Life. Frank H. Smith.
112 Dropsy; Its Therapeutics. Frank F. Hoffmann.
113 Intestinal Surgery. Case of Acute Intestinal Obstruction Due to Perforation of an Inflamed Meckel's Diverticulum. Marshall Clinton.

Journal of Medicine and Science, Portland, Maine.

May.

114 Acid Intoxication. Chauncey R. Burr.
115 Radium. Charles O. Caswell.
116 Hysterectomy of a Gravid Uterus Complicated by Fibroids. W. P. Giddings.

Medical Sentinel, Portland, Ore.

May.

117 Smallpox in Oregon. James C. Zan.
118 Differential Diagnosis of Smallpox. Sanford Whiting.
119 Puerperal Septicemia. A. G. Prill.
120 Early Treatment of Tuberculous Joints. John Carpenter Schapps.
121 A Successful Dressing for Fracture of the Clavicle. A. W. Botkin.

Canadian Journal of Medicine and Surgery, Toronto.

June.

122 A Case of Cerebral Tumor Probably of Left Frontal Lobe. Campbell Meyers.

123 Cure of Consumption by Feeding the Patient with Subcutaneous Injections of Oil, and Its Digestion by the White Globules of the Blood. Thomas B. Keyes.
124 Alkalometry. Robert M. Sterrett.

Dominion Medical Monthly, Toronto.

May.

125 The General Management of Diabetes. Frederick C. Shattuck.
126 Some Notes on Gastroptosis, with Special Reference to Its Relation to Pregnancy. Graham Chambers.
127 Urinary Calculus. J. F. Uren.
128 New Era in Medical Teaching—University of Pennsylvania about to Dedicate Most Complete Medical Laboratory in America. George E. Nitzsche.

Medical Times, New York.

June.

129 Concerning the Physician's Finances. J. Howe-Adams.
130 How to Treat Eyestrain Intelligently. Ambrose L. Ranney.
131 Some Points in the Interpretation and Care of Disorders of the Circulation. Louis F. Bishop.
132 Some Observations on Tuberculosis. John B. Huber.
133 The Necessity of Studying Detail in Cardiac Cases. G. R. Reynolds.
134 Case of Multiple Calculus Removed by Suprapubic Section Four Weeks After an Exploratory Suprapubic Section, in which the Stones Were Overlooked. G. Frank Lydston.

Texas Medical Journal, Austin.

May.

135 Thoughts on Diagnosis, Pathology and Treatment. Henry K. Leake.
136 The Cause and Prevention of Rape. F. E. Daniel.

Nashville Journal of Medicine and Surgery.

April.

137 Address, Medical Department Vanderbilt University. Louis Leroy.
138 Epiplocele—An Unusual Case. Samuel S. Briggs.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

May 21.

1 The Future of London Medical Education. Isambard Owen.
2 *Hematoma and Hematocele, a Study of Two Cases of Early Tubal Pregnancy. Alban Doran.
3 Total Extirpation of the Prostate for Radical Cure of Enlargement of That Organ. P. J. Freyer.
4 *Total Prostatectomy: Deductions to be Drawn from the Presence of Striated Muscle Fiber in the "Capsule" of the Parts Removed. Cuthbert S. Wallace.
5 *Relative Advantages of Suprapubic and Perineal Prostatectomy. Edward Deanesly.
6 Remarks on a Series of 120 Operations for Vesical Calculi. F. A. Southam.

2. **Hematoma and Hematocele.**—Doran reports two cases and discusses the question of the necessity of operation. One was a pelvic hematocele and the other a hematoma; the former was not operated on. In both the general results were good. The second case indicates, he thinks, that hematoma is not so rarely a result of interrupted extrauterine pregnancy as has usually been held. The tubal sac is more likely to discharge its contents through the pelvis into the peritoneal cavity or to burst into that cavity than to rupture between the folds of the broad ligaments. When the broad ligament is opened up in this way instead of hematoma forming, the ovum not rarely continues to develop, constituting the tubo-ligamentary pregnancy. In some cases the ovum is destroyed and true hematoma develops and displaces the pelvic peritoneum upward after the manner of a tubo-ligamentary sac. In such a case the lower part of the hematoma, bulging behind the cervix, may be mistaken for a hematocele occupying the Douglas pouch, though that pouch really no longer exists. Secondly, the hematoma of extrauterine gestation is not as innocuous as compared with hematocele as some authorities teach. The peritoneal capsule may yield, until dangerous intraperitoneal hemorrhage results. Thirdly, there is no question as to the fact that hematocele is a very frequent result of interrupted tubal pregnancy, but he thinks that while the perils of hematoma have been underrated, those of hematocele have been exaggerated, at least as regards the early stages of ectopic gestation. Hematocele often means that the issue of blood from a tubal mole has permanently ceased and it is not certain that the same may not be said in many cases of early rupture of the tube.

4. **Prostatectomy.**—Freyer reports twenty more cases of this operation carrying his work down to the end of 1903. He gives brief notes of the cases. His paper is illustrated.

5. **Suprapubic and Perineal Prostatectomy.**—Deanesly reviews the advantages and disadvantages of the suprapubic and perineal methods. He prefers the latter for the following reasons:

It is anatomically more direct; it does not inflict a double wound in the bladder, and does not open the prevesical cellular tissue. Again, the whole operation can be performed deliberately and under the direct guidance of sight as well as touch; it permits, therefore, the operator to remove as much or as little of the prostatic overgrowth as the circumstances of the case or the nature of the enlargement render desirable or feasible. Lastly, the drainage of the bladder and subsequent wound treatment are much facilitated by the dependent opening. . . . Thepreliminary stages of the operation offer a method of exploring the bladder which for many purposes is much superior to suprapubic cystotomy.

The Lancet, London.

May 21.

7 The Future of London Medical Education. Isambard Owen.
8 *Some Disorders of the Blood and Blood-forming Organs in Early Life. Robert Hutchison.
9 *Acute Infective Gangrenous Processes (Necroses) of the Alimentary Tract. Edred M. Corner.
10 *Some Experiences in the Surgical Treatment of Suppurative Lesions of the Nasal Accessory Sinuses. Herbert Tilley.
11 *Note on the Value of Hot-water Injections as a Substitute for Nutrient Enemata in the Treatment of Gastric Ulcer. W. Pasteur.
12 Ankylostomiasis. J. Chronnell.
13 Transplantation of Tendon for Musculo-Spiral Paralysis. H. M. W. Gray.
14 The Results of Treatment on 301 Cases of Phthisis by Open-Air Methods. David Lawson.
15 *Geographical Distribution of Hare-Lip and Cleft Palate. R. W. Murray.
16 Cases of Congenital Deformity in the Fetus. H. Cripps Lawrence and C. Braine-Hartnell.

8. **Blood and Blood-Forming Glands in Early Life.**—Hutchison's second lecture discusses the rôle of the thymus in blood production and the effects of the lymphatic glands. He finds that there is no absolute rule as to the development of the thymus or its involution. Excessive development is sometimes met with, and is associated with sudden death which has been considered due to asphyxia, but another view, however, is that it is merely an index of a general lymphatic dyscrasia, which entails a general feebleness of resistance rendering the subject liable to sudden death from any cause. The vagueness of the latter theory, he remarks, puts it almost beyond the scope of criticism, but at least in one typical case he could find no increase of adenoid tissue or sign of impairment of health. The blood disorders of infancy differ from those of adults largely in their lack of distinction of type. Clear-cut types are less frequent and occur rarely, at least, in infancy and early childhood. There is one type of anemia peculiar to infancy; that is, the anemia splenica infantum, and it epitomizes in itself all the peculiarities of the anemias of infancy, showing, on the one hand, a marked destruction of red cells with a rapid appearing of the nucleated forms, and showing on the other, by the tendency for the non-granular cells of blood, to be increased, that reaction of the adenoid tissue to unfavorable influences which is so notable in childhood. Secondary anemia is prevalent in early life because of the vulnerability of the blood cells and the poverty of hemoglobin and many influences, especially destructive to blood, are especially likely to act, such as defective diet, etc.

9. **Necroses of the Alimentary Tract.**—The part played by strangulated hernia and anomalies of Meckel's diverticulum are discussed in Corner's second lecture, with illustrated cases.

10. **Nasal Accessory Sinuses.**—Tilley describes his methods of radical operation in suppuration of the antrum, frontal and ethmoid sinuses. He prefers the radical operation—complete removal of the front wall in the frontal sinus. The risk of life depends on the situation of the sinus relative to the neighboring vital structures. In the antrum, aside from the absorption of pus, there is practically no danger. With empyema of the frontal ethmoid and sphenoid sinuses the case is very different. Many fatal cases have been reported. As long as the discharge is free the patient will only suffer from the results of absorption of the septic matter and the annoyances, but a severe cold in the head or increase in the size of polypi or other swellings may produce a retention of septic products and evil

possibilities at once present themselves. The risk of operation depends on the parts involved and the surgeon's familiarity with the region and the technic. The maxillary antrum may be operated on without any appreciable risk, but the reverse holds in case of higher sinuses. Tilley is in entire accord with those that maintain that only complete obliteration or the destruction of the bony cavities offers any chance of radical cure. In case of frontal sinus the anterior bony wall should be removed, and any recesses of the sinus thrown into the main cavity by breaking down of partition walls. The fronto-nasal canal must be enlarged, and suppurating anterior ethmoid cells carefully broken down, or reinfection of the higher sinus will occur. Free spontaneous drainage is essential, and if this is kept up there is no serious danger. Generally speaking, operative manipulation in the ethmoid region will be safe if carried out below the level of the insertion of the middle turbinate. The inside of the sphenoidal sinus should never be curetted, for if a large opening be made in the anterior wall, suppuration will generally cease, if the cavity be frequently cleansed with mild antiseptic lotions. Curettage, especially of the outer and upper walls, may be a very dangerous procedure.

11. **Gastric Ulcer.**—Pasteur has treated all cases of gastric ulcer for the past eighteen months with rectal feeding by plain water enemata at body température with good results. It relieves thirst, does away with uncomfortable sensations, the unpleasant taste in the mouth, and the patients are much more comfortable. He says it is a good plan to begin with a five- or six-ounce enema, increasing the volume each time one ounce until ten ounces are easily retained, giving the enemata every four or six hours according to circumstances. In most cases they may be supplemented by small quantities of peptonized milk by the mouth before the end of the week, but in several instances his patients have gone without food for ten days or a fortnight, and in one or two cases for nearly two or three weeks without any complaint or indication that they were the worse for the abstinence. The method, he thinks, gives at least as good results as the ordinary nutrient enemata. It is simpler to carry out, more endurable to the patient, and does away with the unpleasant and offensive daily wash-out.

15. **Hare-Lip.**—Murray has made inquiries as to the geographical distribution of hare-lip. He believes that it occurs among all nations, and that the practice of putting to death deformed children will probably account for its absence in some regions, as Central Africa and Hawaii.

Annales de Dermatologie et de Syphiligraphie, Paris.

Last indexed page 1188.

17 (V, No. 4.) •Conception générale des dermatoses. (Théories des reactions cutanées, des dermatoses composées et des faits de passage). L. Brocq. (Commenced in No. 3.)
18 •Syphilitic Patches on the Scalp. Umbert (Barcelona).—Les plaques crouteuses du cuir chevelu.
19 •Le dosage en radiothérapie et son tracé graphique. Béclère. Abstract.

17. **General Conception of Cutaneous Affections.**—Brocq recognizes two great groups of dermatoses, the true morbid entities and the cutaneous reactions. The first group includes the artificial, parasitic and microbian affections, and the second group the reactions on the part of the skin with or without nervous or nutritional elements or deviation of the tissues from the normal type. He shows in graphic form how the true morbid entities described in the text-books may blend into others or be complicated by others or by mere cutaneous reactions, so that each, instead of being a clearly defined syndrome, may be nebulous around the edges and the transitional forms may mask the true entity in many cases.

18. **Syphilitic Patches on Scalp.**—Umbert regards any dry, circumscribed lesion with infiltration, located on the scalp, as suspicious of syphilis. The eruptive element is drier in case of syphilis than of other scalp lesions. Several hairs are always involved instead of a single hair, as in acne. Another differentiating point is that acne usually attacks the face as well as the scalp. The sudden onset of the syphilitic patch is also a differential feature. There is no inflammatory environment and no pain. The patch usually persists unmodified by general treatment until it is supplemented by local coal-tar or sulphur applications, when it rapidly subsides.

19. **Dosage in Radiotherapy.**—Béclère urges the general adoption of a chart as a means of keeping the record of cases submitted to radiotherapy. The therapeutic reaction to the *x*-rays depends on the amount of rays absorbed. He uses the Holzknecht chromoradiometer (illustrated in THE JOURNAL, xxxix, page 1075), and proclaims that it is no more necessary to induce a dermatitis in *x*-ray treatment than to induce stomatitis in mercurial treatment of syphilis. The aim should be to have the maximum quantity of rays absorbed at each exposure compatible with the integrity of the integument, skin or mucosa. Also to have the interval between the exposures as short as is compatible with the integrity of the integument, skin or mucosa. The maximum dose is less for the young than for adults, and less for adults than for the aged. When the skin is normal this dose varies for the face from 3 to 4 Holzknecht units; for the joints, 4 to 6 H. units; for the trunk, scalp, palm and sole, 5 to 7 H. units. When the skin has been the seat of a recent inflammation and especially if the inflammation still persists, these figures should be reduced by 1 or 2 H. units. On the other hand, these doses can be far surpassed in case of an ulcerating surface. Seven days is the usual interval he prefers. The chart he recommends is an ordinary fever chart, the dates marked off above as usual and the horizontal lines indicating the number of H. units at each sitting. The curve is thus represented by a vertical line representing the number of H. units, followed by a horizontal line representing the number of days that elapse before the second exposure, when the line runs straight up as before through the proper number of H. units, then horizontal again through the days of the interval before the next exposure. The curve forms thus a series of steps, like a flight of stairs, on which can be read at a glance the dosage, intervals and number of exposures. He gives an illustration of a typical chart and describes several cases to show the benefits derived from such accurate dosage. He quotes Sabouraud's experience that 4.5 to 5 H. units are the proper dose for the treatment of alopecia areata. This causes the necessary falling out of the hair without any apparent inflammatory reaction. (See page 1459.)

Bulletin de l'Académie de Médecine, Paris.

20 (LXVIII, No. 17.) •Mbori and Soumaya, Trypanosome Diseases of Camels and Cattle in the Soudan. Cazalbou.—Mbori expérimentale et Note sur la soumaya.
21 •Instrument destiné à faciliter les injections interstitielles de paraffine. Lagarde.
22 Paralysie de la branche profonde du nerf radial apres traumatisme. Suture tardive. Guérison. J. Boeckel (Strasburg).
23 (No. 18.) Three Cases of Sleeping Sickness Among Europeans in the Congo. H. Dupont.—Maladie du sommeil.
24 •Anémie ankylostomiasique des mineurs. A. Manouvriez (Valenciennes).
25 •Myopathie scapulo-humérale. Procédé chirurgical pour remédier à l'impotence des membres supérieurs. Raymond.

20. **Trypanosome Diseases—Mbori and Soumaya.**—Cazalbou inoculated sheep, rats, mice and dogs with trypanosomes derived from dromedaries in the French Soudan affected with "mbori" or the fly disease. The tsetse fly is not known in that locality, but another fly, the *Tabanus soudanensis*, seems to be the source of infection. Laveran discusses whether the symptoms of the disease and the properties of the trypanosome differ from those of other similar affections with which we are acquainted. There are certain features which indicate that it is a distinct morbid entity, but this can be decided only by testing to see whether animals immune to surra and nagana are susceptible to mbori and vice versa. The trypanosomiasis observed in camels by Brumpt at Ogaden and by Sergent in Algeria evidently closely resembles that noted by Cazalbou at Timbuctoo. The soumaya affects zebus and cattle and the trypanosome causing it closely resembles that of mbori. The natives say that it is impossible to keep any domestic animals on the banks of the Bani river. To test this Cazalbou sent four horses down to the river and all developed symptoms of trypanosomiasis after a two to four days' stay. The symptoms in some seemed to be those of nagana. The prevalence to such an extent of trypanosome diseases in the French Soudan was never suspected before.

21. **Paraffin Prothesis.**—The various syringes devised for this purpose have aimed to keep the paraffin warm and thus soft enough for injection. Lagarde accomplishes this result by forcing the paraffin out by means of a screwing piston, the mechanical force of the screw forcing a fine stream of cold paraffin out at the tip. This fine stream is easily worked into place and molded into the proper shape. In the discussion of the subject Hallopeau reported an unfortunate experience with paraffin prothesis. A syphilitic defect of the upper part of the nose was treated by injection of paraffin, which did not accomplish the desired result, but rather aggravated the deformity, as it formed two bunches each side of the nose. A second attempt was made later and it was followed by the instantaneous loss of the sight of one eye. The blindness could not have been due to a manifestation of the syphilis, as the patient had been free from symptoms for years, and syphilitic blindness never comes on with such suddenness. He has also observed that paraffin prothesis in the breast is liable to soften and subside in time, as also when it is used in place of the testicles.

24. **Miners' Anemia.**—When mines are well ventilated they become cooler and thus the conditions are rendered unfavorable for the growth of ankylostomata. The miners say that wooden props in the mines are "unhealthy," and experience has shown that they are right in one sense, as the wood becomes a nest for these parasites, especially when the bark is left on. Manouvriez reviews the history of ankylostomiasis in France, and states that Calmette's investigations are now revealing that it still exists there.

25. **Scapulo-Humeral Myopathy.**—Raymond's patient was a young man presenting a severe typical case of Erb's progressive atrophy of the muscles. He was treated by suturing the right scapula to the fifth and sixth ribs, a silver wire passed through holes in the scapula and then around the ribs, after excision of interposing muscles. Some of the muscles were transplanted and a plaster cast was applied for forty days. He can now, three months later, raise his hand to his head and otherwise use his arm naturally. He is now clamoring to have the other side operated on in the same way.

Berliner klin. Wochenschrift.

26 (XLI, No. 19.) *Ueber einige neuere Untersuchungen auf dem Gebiete der Formaldehyd-Desinfection. H. Bonhoff (Marburg).
27 2 Fälle von Gonokokken-Sepsis mit Nachweis der Gonokokken im Blute bei Lebzeiten der Patienten. P. Krause.
28 Cobra-Gift und Antitoxin. P. Kyes.
29 Zur Ferment-Wirkung des Mumien-Muskels. E. Sehrt.
30 Ueber den angeborenen Mangel der Kniescheibe (congenitally missing patella). O. Heine.
31 Ueber hyperalgetische Zonen am Hals nach Kopfschüssen. R. Mliner.
32 (No. 20.) *Beiträge zur Tuberculose-Frage. A. Heller (Kiel).
33 Untersuchungen über die Bindung von Diphtherie-Toxin und Antitoxin, sowie über die Constitution des Diphtherie-Giftes. J. Morgenroth.
34 *Hernien in Laparotomie-Narben und maligne Degeneration der Intestina des Bruchsacks. M. Sperling.
35 *Prevention of Infectious Diseases in the School. F. Hueppe. —Verhütung der Infectionskrankheiten in der Schule. (Commenced in No. 18.)
36 *Zur Radiotherapie. O. Lassar.

26. **Formaldehyd Disinfection.**—Bonhoff reviews the various disinfecting apparatus on the market and asserts that Flügge's formula of 2.5 gm. formaldehyd to the cubic centimeter is too small a dose to be effectual. For ordinary cases 5 gm. formaldehyd per cubic centimeter and seven hours of exposure are necessary. When the conditions are unfavorable the proportion of formaldehyd should be twice this.

32. **Transmission of Tuberculosis.**—Heller refers to the experiences at Kiel including Wagener's finding of 76 cadavers with primary tuberculosis of the intestines and mesenteric glands in the course of 600 necropsies. Also Hof's finding of primary tuberculosis of the digestive tract without involvement of the lungs in 16.6 per cent. of 15,000 necropsies, and 8.5 per cent. additional in which these lesions in the digestive tract coincided with lesions in the lungs, the total thus being 25.1 per cent. of the entire material. In the country around Kiel the milk is very seldom boiled or pasteurized, while in Berlin the opposite rule prevails. He thinks that this explains the larger proportion of tuberculous infections of the digestive tract in the former. The evidence to date is overwhelmingly in favor of prophylactic measures against tuberculosis infection by the mouth. Infection from inhalation may be primary, in the alveoles, bronchi or lymph follicles, or secondary by inhalation, or through the blood or lymph. He gives examples of each of these six varieties.

34. **Cancer in Hernial Sac.**—Out of 104 cases in which laparotomy was performed for myomectomy, with supravaginal amputation, Sperling had occasion to note in 2 cases the development of a cancer in the ventral hernia which occurred later at the site of the incision. The interval was four and seven years. The cancer was in the thin-walled hernial sac and was inoperable when discovered. In both cases a truss had been worn for several years. The mechanical irritation from the truss may have been aggravated by the buried suture left in the peritoneum.

35. **Prophylaxis of Infectious Diseases in Schools.**—Hueppe's address as delivered at the School Hygiene Congress was summarized on page 1243. Further points are his remark that children's diseases run a milder course the older and consequently the more resistant the children. He also referred to the greater resistance of children who play out of doors all the time even with some member of the family sick in doors. As soon as these children are kept in the house or sent to school they are liable to develop the disease. This accords with the experience in military circles that the best means of stamping out an acute epidemic disease is by thorough ventilation, possibly taking out all the windows. It emphasizes the importance of ventilation in schools. In case of a school epidemic at the beginning of the school year, when the lessons are of paramount importance, prophylaxis should be restricted to isolating the sick only, while the well children should not be debarred from school. Toward the end of the school year, however, the measure of closing the room or school is not so formidable, and on account of the remarkably favorable influence of playing out of doors, the children may be dismissed and given this opportunity as a means of arresting the epidemic. Whooping cough may be transmitted by indirect contact or dried material for a time, while measles seems to require the fresh, moist virus and direct contact for its transmission. In case of measles, the Koplik spots may reveal the existence of the infection in suspects before the contagious stage is reached. Chicken-pox, mumps and rötheln allow the diagnosis of the disease and isolation of the patient in time to prevent infection of others, although he knows of one instance in which an epidemic of mumps could not be arrested until the school room was closed. Contagion "through the air" in scarlet fever and measles probably occurs by germs in the droplets of sputa. He thinks that both are most infectious in the earlier stages, although in case of scarlet fever not until there are definite manifestations in the throat. He does not place much faith in the transmission of scarlet fever in the later, desquamating stage or by dried material, and regards this as highly improbable in case of measles. Indirect transmission of scarlet fever, as in milk, is liable to occur. Diphtheria germs are not very long lived and indirect transmission of the disease is of extremely rare occurrence. But the fact that it does occur occasionally should impose the rule that all material used in teaching children to sew, patchwork, etc., should always be effectually sterilized by steam or dry heat before being given out again. After the age of 5 children are much more resistant to the inroads of diphtheria, although the germ is practically ubiquitous. The predisposition is an important factor, also the fact that the disease declined during the last century nearly to its final extinction, then about the middle of the century it became prevalent again, and since the beginning of the nineties has been declining again. He agrees with Gottstein that 90 to 98 per cent. of all children born now display such a degree of immunity that they can pass through two or three repeated infections with the diphtheria germ without danger. The children of gypsies are entirely immune. In regard to disinfecting school rooms he thinks the delay of the inevitable "red tape" renders its results illusory, and he advocates instead thorough daily cleaning of the room and ample ventilation as

the best mode of combating infection. He adds: "Must we wait for some disastrous epidemic to teach us the lesson to clean the rooms every day?" Oiling the floors facilitates wet cleaning. He thinks the brush and hose attachment invented by Professor von Fritsch of Vienna a valuable means of thorough cleaning with constant washing through the brush. Where wet cleaning is not practicable the vacuum cleaning apparatus should be used. Some such cleaning measures should be applied daily. Eye affections are more serious the younger the child, and fully 14 per cent. of the cases of blindness in children are due to infectious children's diseases. The habit of swallowing sputa is swinish, and is especially dangerous for children, as they are peculiarly susceptible to infection by way of the digestive apparatus. Not back to nature, but forward to health should be our motto, and preventive hygiene should be supplemented by constructive or positive hygiene.

36. **Radium Treatment of Cancer.**—Lassar remarks that notwithstanding radium is so expensive yet the cost of applying radium treatment on the whole is much less than that of an *x*-ray apparatus and its maintenance. He uses the radium in a flexible lead tube on a mica plate which allows it to be placed exactly over the desired spot. At the first indication of irritation, swelling, redness or pigmentation the exposure is suspended and time enough allowed for the irritation to entirely subside. The one essential in radium treatment is medical oversight. Fine results have been attained in treatment of psoriasis, inflammatory edema and inflammations of all kinds in the face, neck and hand. An especially favorable field for radium treatment is that afforded by the inoperable recurrences of mammary cancers. They are superficial, as the gland has been extirpated, and the recurring nodules can be influenced by the radium and practically cured. A number of typical cases of cancers cured by the radium are illustrated. All had been declared inoperable beforehand, or the subjects had refused an operation, and now there is not the slightest indication for surgical intervention. The radium is in constant use at his clinic from morning to night and not a single mishap has occurred in the thousands of applications.

Dermatologische Zeitschrift (Lassar's), Berlin.

Last indexed page 564.

37 (XI, No. 1.) *Inoculation of Anthropoid Ape with Syphilis. Oscar Lassar.—Ueber Impfversuche mit Syphilis am anthropoiden Affen.
38 *Value of X-Ray Treatment in Skin Diseases. H. E. Schmidt (Lesser's clinic, Berlin).—Ueber Röntgenbehandlung der Hautkrankheiten.
39 Peculiar Form of Eruption in Stripes. F. Pinkus (Berlin).—Ueber eine bes. Form strichförmiger Hautausschläge.
40 Atrophodermia erythematosa maculosa (Lichen planus atrophicus). W. Wechselmann (Berlin).
41 *Progress in Phototherapy. H. Strebel (Munich).—Fortschritte in der Lichttherapie.
42 Mykosis fungoides. Mikroskopische und bakteriologische Untersuchungen. S. Sereni (Rome).
43 (No. 2.) *Ueber Therapie des Ekzems. O. Lassar.
44 (No. 3.) *Ueber die vaginale, spezifische Behandlung schwangerer Frauen (of pregnant women). H. Vörner (Leipsic).
45 Zum Studium der Harn-Retention bei Tabes dorsalis. F. Bierhoff (New York).
46 *Diet Treatment of Skin Diseases. O. Lassar.—Ernährungstherapie bei Hautkrankheiten.
47 (No. 4.) Zur Histologie der Epididymitis gonorrhoica. J. Sellei (Budapest).
48 (No. 5.) Zur Pathogenese kolliquativer Blasen (blisters). K. Kreibich.
49 Das Formalin und seine Wirkung auf den Favus-Pilz (action on favus). S. L. Bogrow (Moscow).
50 Mehrere Fälle von Haut-Atrophie (of skin). A. Alexander (Breslau).
51 Zur Pathogenese der glatten Atrophie des Zungengrundes (smooth atrophy of base of tongue). J. Heller.
52 Eine neue Kataphorese-Elektrode mit auswechselbaren Tonkappen (with interchangeable earthenware caps). A. Strauss (Barmen).
53 Zur Therapie der Tylosis palmaris bei Erwachsenen (in adults). T. Mayer (Berlin).

37. **Inoculation of Ape with Syphilis.**—Lassar's illustrations testify to the success of his inoculation of an ape with syphilis. He remarks that the results will serve as a control for persons who claim to have discovered the bacillus of syphilis. All they have to do is to inoculate a chimpanzee with the alleged causal germ. A negative result proves nothing, but a positive one would be strong testimony in favor of their assertions.

38. **Roentgen Treatment of Cutaneous Affections.**—Schmidt thinks that the action of the *x*-rays on the tissues which induces the hair to drop out, at the same time renders the cells an unfavorable culture medium for bacteria and they die, although not killed directly by the rays. On the whole, this mode of treatment accomplishes more in many cases than all our other therapeutic measures. He prefers a tube which shows up the bones of the hand a dark gray. In treatment of cancer he has had fine results when the growth was superficial, but has never witnessed any special effect on subcutaneous growths. One of his most satisfactory cases was a dry, chronic eczema with intolerable pruritus. It healed under the *x*-rays, but the pruritus recurred again after six weeks, but subsided again under renewed application of the *x*-rays.

41. **Progress in Phototherapy.**—Under this heading Strebel describes his technic and the special appliances he has devised for the purpose. One is his "electro-photo-cautery" by which the rays of a volta arc light from a current of 2 amperes are focused on the skin strong enough to burn it. The moment the rays are focused on the spot there is total ischemia, the same as in application of superheated air. Living tissue offers greater resistance on account of the blood circulating through it, while morbid or dead tissue rapidly chars under the influence of the rays. Moles, warts, varices, angiomata, etc., are rapidly destroyed by this action; chancroids heal in three weeks, open boils, tertiary syphilitic ulcers, sycosis and other superficial affections are rapidly cured, as also acne. He reports two cases of lupus erythematodes cured in a single application. The "photo burn," as he calls it, has also definitely cured a number of cases of lupus. This electro-photo-cautery does not supersede but is a valuable adjuvant to Finsen treatment, and may be associated with the latter, thus shortening the course of treatment. He has further devised an apparatus for applying phototherapy to inaccessible cavities. He focuses the light of the sun or of a powerful volta arc light on the rounded top of a short quartz cylinder which collects the rays and focuses them on the rounded top of a second similar cylinder below. By this means it is possible to transmit the light through a system of quartz cylinders as far into the interior of cavities as may be desired. In conclusion he gives an illustration of his lamp for phototherapy for which he claims a number of advantages over Finsen's and other similar lamps. He regards the pigmentation observed after the inflammatory reaction to the light as due to quite other causes than the latter. The light induces a primary irritation of the nerves in the exposed region, entailing inflammation as a trophic reaction differing essentially from the pigment reaction. He exposed an albino patch on a partial albino to the action of the focused light. A typical inflammatory reaction followed, but there was no pigmentation. After one exposure to the light the nerves of the part become accustomed to the irritation, and the inflammatory reaction grows less and less or does not appear at all. He thinks that this nervous influence is best shown by the rapid healing of alveolar pyorrhea under phototherapy after resisting all other known measures. This lesion is probably due to trophic malfunction with secondary bacterial invasion. The phototherapy stimulates the nerves to normal function and as they regain tone the tendency to suppuration subsides. The action in lupus is probably identical. The influence of the light stimulates the trophic nerves to such activity that the processes of regeneration in the diseased tissue soon result in rendering them unsuitable for culture media for bacteria, the latter die off and the lesion heals. Anything that has an influence on the albumin metabolism is liable to alter the conditions in such a way as to render them toxic for bacteria. This is the explanation of the success of serum treatment and inoculation. The introduction into the organism of some strange albuminoid substance modifies the albumin metabolism. The same explanation may apply to the effects of phototherapy. The light may modify the albumin metabolism in the tissues exposed and thus stimulate them to normal vital processes.

43. **Treatment of Eczema.**—Lassar thinks that careful investigation will generally reveal the primal cause of the ecze-

ma, the use of some cosmetic or substance needed in the daily occupation, such as turpentine by artists, contact with certain plants, etc. When this is discovered the affection will soon heal if kept from further irritation. Great progress will be realized when persons with cutaneous affections will return to the physician for a systematic, passive course of treatment, the measures applied varying with the conditions found at each visit. The principal trouble in skin diseases is the damage wrought by self-medication. The main point in treatment is to ward off sources of further irritation. The use of powder, salve and dressing is chiefly to prevent the scratching of the itching region. X-ray treatment is proving more and more effective and reliable for many cases of eczema, particularly on face and hands. After the preliminary procedures the *x*-rays are able to cure many cases without the tedious salves and pastes.

44. **Specific Vaginal Treatment of Syphilis During Pregnancy.**—Vörner tabulates the results of treatment of 40 pregnant syphilitic women by mercurialized vaginal suppositories. He makes the suppositories out of equal parts of lard and mutton tallow, with 12 to 15 per cent. mercury, a total of 3 to 5 gm. It is introduced and pressed against the mouth of the uterus by a tampon. The tampon must be non-absorbent, and is, therefore, impregnated with tannin and glycerin or alum and glycerin. The tabulated results show a favorable influence of this simple specific treatment on the course of the pregnancy and the morbidity of mothers and children, when the latter receive suitable care after birth and breast milk, with specific treatment of symptoms. Neglected, poorly nourished children succumbed in about the same proportion as among similar children of untreated mothers. He thinks this classification of children with inherited syphilis would be a good basis for comparative statistics. Where the conditions are favorable, the vaginal method may be applied with good prospects of success, but where they are not, the most that can be hoped is to bring the woman to normal termination of her pregnancy.

46. **Dietetic Treatment of Skin Diseases.**—Lassar reiterates that dietetic measures are of the greatest importance for the cure of various cutaneous affections. Psoriasis, for instance, is unmistakably benefited by refraining from meat. Cheese is liable to aggravate certain skin diseases or possibly induce them. All kinds of erythemata and rashes with exudation are benefited by calomel purges, followed by a course of mineral waters. Salicylic medication is a valuable adjuvant. The salicylic acid seems to attack the morbid process like an antitoxin, and paralyze the evil effects of the poisons circulating in the blood. The subject must learn what articles of food he must avoid, and should strive to eat at regular intervals and in small amounts. A single hastily eaten meal when he is overfatigued, overheated or irritated may affect him like ingesta containing ptomains. In case of prurigo the nervous system must be soothed and sleep restored. Eczema frequently develops after the prurigo, and both may be avoided by keeping the bowels in good order, avoiding excess of bread and potatoes, and all other causes tending to induce flatulence. Prurigo patients are usually constipated, with hard stools. The tendency to furuncles and phlegmons in diabetic and gouty subjects may be combated by putting the patients on a sugar-starvation diet. So soon as all substances are avoided that form or become transformed into sugar, the tendency to furuncles subsides. The excess of sugar in the tissues affords fine culture media for the pyogenic germs. When this excess is avoided the germs cease to colonize in them, irrespective of whether the elimination of sugar is physiologic or pathologic. The same reasoning and conclusions apply also to uric acid in gout. Any intoxication may affect the skin and reduce its resisting power. He defines scrofula as a lesser resisting power due to inherited weakness and insufficient nourishment or care, and insists that everything which tends to enhance the resisting powers aids in curing the local affection. Obese subjects should diet to reduce their weight, and by this means avoid cutaneous lesions from friction between folds of the skin, etc.

Deutsche medicinische Wochenschrift, Berlin and Leipsic.

54 (XXX, No. 19.) *Distomum Felineum as Parasite of Man. M. Askanazy (Königsberg).—Die Aetiologie und Pathologie der Katzenegel-Erkrankung des Menschen.
55 *Ein neues Dysenterie-Heil-Serum und seine Anwendung bei der Dysenterie. L. Rosenthal (Moscow).
56 *Ueber alimentäre Lävulosurie bei Leberkranken (in liver affections). B. Chajes (Senator's clinic, Berlin).
57 *Ueber akneartige Formen der Haut-Tuberkulose. Bettmann (Heidelberg).
58 Quantitative Determination of Products of Putrefaction and Fermentation in the Feces. H. Ury (Berlin).—Ueber den quant. Nachweis von Fäulnis- und Gärungs-Produkten in den Fäzes.
59 Treatment of Inflammatory Contracture of Hip Joint by Subtrochanteric Osteotomy. C. Helbing (Hoffa's clinic, Berlin).—Behandlung der koxitischen Hüftgelenkskontrakturen durch Osteotomie.
60 Ein verbessertes Tonsillotom. F. Rosenfeld (Berlin).
61 Hämaturie als einziges Symptom Barlow'scher Krankheit. E. Neter (Berlin).

54. **Etiology and Pathology of Affections Due to Distomum Felineum.**—Askanazy has been able to establish that the cat leech or *Distomum felineum* causes a characteristic syndrome in man and, further, that it requires an intermediate host to complete its life cycle. He has also discovered this intermediate host. It is a small, common river fish, the *Leuciscus rutilus*, and one of his 4 patients confessed to eating these and other fish raw. In the 3 cases in which necropsy was possible a colloid carcinoma was found in the liver in each, and these parasites were numerous in it and through the biliary passages. This distomum is common in many localities, but he does not know of any previous publications in regard to lesions induced by its presence.

55. **New Antidysentery Serum.**—Rosenthal's serum is derived by inoculation of animals with first dead cultures, then living cultures, and then the toxins. The technic is to be described in detail in the *Centralblatt f. Bakteriologie* by Gabritschewsky, the chief of the Bacteriologic Institute. Out of 157 dysentery patients treated with this serum, only 7 died with indications of uncomplicated dysentery, and one was 75 years old. Three of these fatal cases were not seen until the end of the first or second week of the disease. The percentage of mortality was reduced by one-half as compared with the course of the dysentery in other patients not receiving the serum, and also in previous years and in other hospitals. When it could be given in the course of the first three days recovery was prompt in one or two days. Marked benefit was apparent from its use, even in the advanced cases with small pulse, cold hands and feet, the sphincter already paralyzed and bloody slime dripping from the anus. The stay in the hospital was very much shorter than that of dysentery patients elsewhere and of the controls.

56. **Alimentary Levulosuria in Liver Affections.**—Chajes reports personal experiences, and states that the number of patients known to have liver affections and tested for alimentary levulosuria is now 84. Of this number, 86.9 per cent. responded positively to the test, while only 15 per cent. of 99 persons free from any liver affection gave a positive reaction. He adds that 11 cases of syphilitic icterus tested by Samberger, all without exception responded positively. (Strauss' article calling attention to this mode of differential diagnosis of liver affections was summarized in these columns at the time.)

57. **Forms of Cutaneous Tuberculosis Resembling Acne.**—Bettmann regards the lesions he observed on 2 patients as a complication or a retrogressive stage of the ordinary forms of cutaneous tuberculosis. The process is by no means an ordinary inflammation as in common acne, but is a tuberculous growth with secondary suppuration. The suppuration always occurs in the center of the papule, and after evacuation of the pus the form of the papule shows the nature of the primary growth. The marginal infiltration in lupus follicularis is always evident under pressure from glass. He found tubercle bacilli in some of the pustules and, encouraged by this fact, he sought to obtain bacilli from lupus pustules by inducing suppuration by injection of various fluids. He was successful in only one instance, finding 2 bacilli in a single lupus focus after slight suppuration induced by injection of a very weak solution of potassium catharidinate.